TIGER OF SWEDEN

PART 1.4

Restricted Substance List

May 2023

Document Content

CHANGE LOG FOR TIGER OF SWEDEN RESTRICTED SUBSTANCE LIST

Page	CAS	Name	Change/Amendment
36	213-103-2	Hydroxymethyl acrylamide (N-(hydroxymethyl)acrylamide	The new candidate list substance (SVHC) has been added to the guide.

Page	CAS	Name	Change/Amendment
37-38	29420-49-3 220689-12-3	Perfluorobutanesulfonic acid (PFBS)	Two salts of perfluorobutanesulfonic acid is added as new candidate list substances (SVHC) to the section of PFAS – "Highly fluorinated sulfonic acids (PFOS and related substances)".

Page	CAS	Name	Change/Amendment
45	-	DMFa (N,N-dimethylformamide)	Updated testing standard EN 16178 (footwear and footwear components) is added.

Page	CAS	Name	Change/Amendment
47	-	Benzotriazols (UV-320, UV-327, UV-328 and UV-350)	Updated testing standard ISO 24040:2022 is added.

Page	CAS	Name	Change/Amendment
30	-	Chromium substances	Several testing methods is added: • EN 16711-1 (total content in textiles) • EN 16711-2 (extractable content in textile) • ISO 17072-1 (extractable content in leather) & ISO 17072-2 (total content in leather). LOQ: 10 mg/kg (total content), 0.1 mg/kg (extractable content)

Page	CAS	Name	Change/Amendment
28	-	Formaldehyde	Updated testing standard ISO 27587 was added to analyze formaldehyde in leather and process auxiliaries

Page	CAS	Name	Change/Amendment
37	-	PFAS-highly fluorinated carboxylic acids (PFOA and related substances)"	Updated testing standard EN 17681-1, 2 (textile and textile products) and ISO 23702-1 (leather) is added.

Page	CAS	Name	Change/Amendment
37	13252-13-6	PFAS-Highly fluorinated ethers (such as HFPO-DA)	Updated testing standard EN 17681-1, 2 (textile and textile products) is added.

Page	CAS	Name	Change/Amendment
37	/	PFAS-Highly fluorinated sulfonic acids (PFOS and related substances)	Updated testing standard EN/TS 15968 and EN 17681-1, 2 (textile and textile products) is added

Page	CAS	Name	Change/Amendment
40-41	/	Phthalate esters	Updated testing standard ISO 16181-2 (footwear) is added

Page	CAS	Name	Change/Amendment
30	/	Melamine	SVHC substances is added under own heading

Page	CAS	Name	Change/Amendment
22	/	Bisphenol S, BPS	SVHC substances is added under Bisphenols

Page	CAS	Name	Change/Amendment
22	/	Bisphenols	Updated testing standard pr ISO 11936, a preliminary standard is added

Page	CAS	Name	Change/Amendment
38	/	Perfluoroheptanoic acid (C7) and its salt	SVHC substances is added under PFAS - Highly fluorinated carboxylic acids (PFOA and related substances)

Page	CAS	Name	Change/Amendment
27	/	Barium diboron tetraoxide	SVHC substances is added under Flame retardants/Biocides - Boric acid, borate compounds

Page	CAS	Name	Change/Amendment
26	/	Bis(2-ethylhexyl) tetrabromophthalate (TBPH)	SVHC substances is added under own heading as a Flame retardant/Plasticizer

Page	CAS	Name	Change/Amendment
44	/	Dioctyltin dilaurate	Is added under Tin organic compounds (Organostannic compounds)

Page	CAS	Name	Change/Amendment
/	13560-89-9; 135821-74-8; 135821-03-3	Dechlorane Plus	This flame retardant has been deleted from the RSL

Page	CAS	Name	Change/Amendment
47	/	UV stabilizers - included DBMC, 3-BC and benzotriazoles.	Several UV stabilizers have been gathered under same heading.

Page	CAS	Name	Change/Amendment
48	/	Trisubstituted tin organic compounds.	Updated testing standard ISO/TS 16179 is added

Page	CAS	Name	Change/Amendment
20, 31, 40	/	**APEO, Phthalate esters and Chromium VI**	**Clarifications have been done regarding which parts of standards are suitable for testing APEO, Phthalate esters and Chromium VI**

1.4 TIGER OF SWEDEN RESTRICTED SUBSTANCE LIST

Introduction

Tiger of Sweden is committed to operate in an environmentally sustainable manner to protect the consumers, workers, environment, and the brand. The requirements in this document are in accordance with current national legislation and EU legislation, which includes the REACH legislation and voluntary eco-labelling schemes. The requirements reflect an awareness of how chemicals affect human health, the environment and constantly increasing quality demands of consumers.

Suppliers shall always consider the safety and suitability of any chemicals used in their products regardless of whether there are specific regulations. Manufacturers, importers and other suppliers must ensure that their products meet community safety expectations, and they must take responsibility for consequences of harmful chemicals present in a product.

Tiger of Sweden´s Restricted Substance List (Tiger of Sweden RSL) applies to all products, including but not limited to apparel, footwear and accessories. Tiger of Sweden RSL also applies to all raw materials, parts, trims, sundries, chemicals and other goods supplied or used in the manufacturing of Tiger of Sweden´s product range, including packaging materials.

Due to national legislations in some countries where we are selling our products, the limits in Tiger of Sweden RSL in some cases are stricter than in REACH.

We require our suppliers and partners to study this document carefully and implement processes in their supply chain to comply with these requirements. Tiger of Sweden RSL must be shared with all upstream users in the supply chain, both factories producing finished products and suppliers of raw materials, components and chemicals.

Tiger of Sweden requires that all suppliers comply with REACH and continuously follow the updates on the website of the European Chemical Agency (ECHA). ECHA is the European Authority for REACH on behalf of the European Commission: http://ECHA.europa.eu

In case of specific question to Tiger of Sweden Restricted Substance list, please contact the following: csr@tigerofsweden.com

1.4.1 LEGISLATION

1.4.1.A EU LEGISLATION REACH

The European Chemical Legislation, REACH (Registration, Evaluation, Authorization and Restriction of Chemical substances) has been in force since 1st of June 2007. The objective of REACH is to ensure a high level of safety for human health and the environment. The communication requirements of REACH ensure that not only manufacturers and importers but also their customers, i.e. downstream users and distributors, have the information they need to use products safely.

Mandatory REACH duties

Tiger of Sweden requires that all suppliers are prepared to deliver articles which comply with the REACH regulation. The suppliers must constantly review updates of:

- The candidate list with Substances of Very High Concern, the SVHC list.

  Under EU REACH regulation, substances that are one of the following can be regarded as substance of very high concern (SVHC):
  - Carcinogenic, Mutagenic or Toxic to Reproduction (CMRs)
  - Persistent, Bio-accumulative & Toxic (PBT)
  - Very Persistent & Bio-accumulative (vPvB)
  - Seriously and/or Irreversibly Damaging the environment or human health, as substances damaging the hormone system

  If a substance is identified as an SVHC, it will be added to the Candidate List for eventual inclusion in the Authorisation List, regulated under article 33 and will be included in Annex XIV or XVII.

- The Authorisation list, Annex XIV, contains priority substances recommended from the Candidate list. Those SVHCs will not be allowed to be used, placed on the market or imported into the EU after a date to be set unless the company is granted an authorization.

- List of restrictions, Annex XVII, contains those substances (on its own, in a mixture or in an article) for which manufacture, placing on the market or use is limited or banned in the European Union.

The three lists mentioned can be found on the website of the European Chemical Agency (ECHA), http://ECHA.europa.eu.

Article definition in force from September 2015

The REACH regulation is divided into restrictions for substances, preparations and articles. Textiles and Clothing are in the REACH-regulation considered to be so-called "articles".

The general definition of an article in REACH, Article 33, is: "An article is an object which during production is given a special shape, surface or design which determines its function to a greater degree than its chemical composition".

Article 33 of Regulation No 1907/2006, as amended on September 2015, must be interpreted as meaning that, for the purposes of application of that provision, it is for the supplier of a product one or more constituent articles of which contain(s) a substance of very high concern identified in accordance with Article 59(1) of that regulation in a concentration above 0,1 % weight by weight of that article, to inform the recipient and, on request, the consumer, of the presence of that substance by providing them, as a minimum, with the name of the substance in question.

An article will always remain an article, even when it is joined together with other articles to form a larger more complex article/product. The obligation to provide information according to Article 33 is triggered as soon as an individual part, which fulfills the definition of "article", contains 0.1% (w/w) or more of a Candidate list SVHC. SVHC's in an article must be < 0.1% (w/w).

For Tiger of Sweden products the article definition includes individual components in the product, e.g.:

- Zippers, labels, buttons, and other components that are attached to the garment
- Shoe laces, metal eyelets, shoe soles, insoles and other components that are attached to shoes, bags etc.

A product example that is regulated as a preparation would be nail polish. The general definition of a preparation in REACH is: "A mixture or solution composed of two or more substances", follow the link, http://the-ncec.com/reach-polymers-articles-and-preparations

1.4.1.B USA - CALIFORNIA PROPOSITION 65

What is Proposition 65?
Proposition 65 requires businesses to provide warnings to Californians about significant exposures to chemicals that cause cancer, birth defects or other reproductive harm. These chemicals can be in the products that Californians purchase, in their homes or workplaces, or that are released into the environment. By requiring that this information be provided, Proposition 65 enables Californians to make informed decisions about their exposures to these chemicals.

What types of chemicals are on the Proposition 65 list?
The list contains a wide range of naturally occurring and synthetic chemicals that include additives or ingredients in pesticides, common household products, food, drugs, dyes, or solvents. Listed chemicals may also be used in manufacturing and construction, or they may be by-products of chemical processes, such as motor vehicle exhaust.

Link to the complete list can be found here:
https://oehha.ca.gov/proposition-65/proposition-65-list

What are the penalties for violating Proposition 65?
Penalties for violating Proposition 65 by failing to provide warnings can be as high as $2,500 per violation per day.

The most important steps for complying with proposition

- Determine which of your products are likely to be sold in California
- Identify the supplier for each of those products
- Request relevant compliance data from suppliers
- Track which products most likely may contain Proposition 65 substances and in what quantities
- Maintain records to support claims in case of enforcement action

Label requirement
Refer to Appendix 03 for assessment on labelling requirement

For more information on Proposition 65 visit:
https://oehha.ca.gov/proposition-65
https://oehha.ca.gov/proposition-65/law/proposition-65-law-and-regulations

1.4.2 COMPLIANCE

The Supplier is obliged to be in full compliance with Tiger of Sweden RSL, to be updated and in compliance with the REACH legislation, the candidate list of Substances of Very High Concern (SVHC's) and California Proposition 65. Tiger of Sweden accepts a maximum concentration of 1000 mg/kg for substances on the candidate list in each homogeneous part of the product, except if lower limit applies as per other part of this document. Tiger of Sweden requires each of our suppliers to certify their compliance to the Tiger of Sweden RSL by signing the Production Agreement in the SOP, PART 1.2

As Tiger of Sweden has a strict "no fault" policy related to product safety requirements, any breach of compliance with the Tiger of Sweden RSL is considered a breach of contract, refer to Production Agreement in the SOP, PART 1.2; paragraph 16 or Nomination Agreement in the STP, PART 1.2; paragraph 5 or Supply Agreement, paragraph 4.

Please Note!
In the above mentioned paragraphs, the Manufacturer accepts responsibility to comply with Tiger of Sweden's product safety requirements for any Raw Materials sourced by the Manufacturer; including materials for Developing Samples such as Proto Types, Selling Samples etc. and Bulk Production.

To ensuring the Suppliers compliance with the Tiger of Sweden RSL, any testing must be executed by a nominated laboratory appointed by Tiger of Sweden.

1.4.3 TIGER OF SWEDEN STRATEGY REGARDING CHEMICAL TESTING

The Chemical Strategy in Tiger of Sweden includes that we apply risk assessment from design development to the final order is settled, communicating actively throughout the supply chain, from the design process to the supplier regarding risk elements. A selection of styles/components for Tiger of Sweden RSL testing will be chosen on each season for verification of the working process and to control if Tiger of Sweden products are complying with Tiger of Sweden RSL requirements.

The risk assessment is based on diverse criteria such as:

- High risk articles (e.g. including prints, finish, coating and padding).
- High volume (both large order sizes on volume and/or value and recurring orders on SSP).
- Supplier history (e.g. earlier fails or new supplier).

Tiger of Sweden has developed a tool for risk assessment, the Chemical Risk Matrix, which is placed in this section.

We urge suppliers to purchase dye stuff, pigments and textile auxiliaries from reputable suppliers, such as ETAD members (www.ETAD.com), e.g. BASF, CHT-Bezema, Clariant, Dystar, Huntsman and Rudolf. Products purchased with these suppliers and applied appropriately will minimize the risk for chemical failure.

On certain chemicals, e.g. NPEO, there might be a significant difference between Tiger of Sweden RSL and REACH regulation and/or governing law. There might also be criteria in Tiger of Sweden RSL which are set due to common industry standards. It is at Tiger of Sweden's sole discrepancy to decide on failed articles, when the failed chemicals are not regulated by law, or when the legal limit varies from country to country.

Tiger of Sweden Risk Matrix

TIGER OF SWEDEN	**Natural fibres** incl. but not limited to:					**Synthetic fibres** incl. but not limited to:																
Chemical:	**Cotton**	**Linen**	**Wool**	**Silk**	**Viscose**	**Polyester**	**Polyamide**	**Acrylic**	**Acetate**	**Elastane**	**Natural & Synthetic Blends**	**Natural Leather**	**Artificial & Coated Leather**	**Plastics and other synthetic materials**	**Coating, Print & paint**	**Finishes**	**Adhesives & Glue**	**Metal parts**	**Rhinestones & Sequins etc.**	**Fusion, Padding, Feather & Down**	**Desiccant' s**	**Packaging material**
AZO dyes	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓							
Allergenic dyes						✓	✓	✓	✓	✓	✓											
Carcinogenic dyes	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓							
NPEO, OPEO (APEO)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓		
Short Chained Chlorinated Paraffin's												✓	✓	✓	✓							
Formaldehyde	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓					
Total Lead												✓	✓	✓	✓		✓	✓	✓			✓
Total Cadmium												✓	✓	✓	✓		✓	✓	✓			✓
Extractable Heavy Metals	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓			
Soluble Heavy Metals														✓				✓	✓			
Nickel Release																		✓				
Cr +6 (leather)												✓	✓									
N-Nitrosamines														✓								
PFOA, PFOS	✓**												✓	✓**	✓	✓**						
PAH													✓	✓	✓		✓		✓			
Phthalates													✓	✓	✓		✓		✓			✓
PVC detection													✓	✓	✓							✓
Volatile Organic Compounds													✓	✓	✓	✓	✓		✓			
pH Value	✓	✓	✓	✓	✓						✓	✓	✓									
Organotin Compounds	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓					
Chlorinated Phenols	✓	✓	✓	✓	✓						✓	✓	✓		✓							✓
Dimethyle-fumerate	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓				✓	✓
Cobalt Dichloride																					✓	✓
Total Cd, Hg, Pb, Cr +6 ***																						✓
Blowing agents													✓	✓*	✓							
Triclosan/ Triclocarban																✓						

* Relevant for rubber
** Relevant for stain and water repellent finishes or coatings on fabrics
*** Note testing method for Cr +6 is not the same as for leather – refer to RSL for details

Tiger of Sweden Chemical Testing
Tiger of Sweden reserves the right to select and test products at any stage of production. Testing on development and sample stage may be executed on request from Tiger of Sweden.

Suppliers must promptly send sufficient sample material with a completed Test Request Form to a nominated laboratory.
Testing shall always be executed on:

- Bulk production material/components
- Test what can be tested before production start (e.g. trim)
- If any after treatment is to be applied to the ready garment, only ready printed/coated/washed bulk production components are to be tested

Tiger of Sweden will pay for this testing if the result is passed, but in case of a Tiger of Sweden RSL failure; the supplier will be responsible to pay for any chemical failures, including:

- First test where any component fails under Tiger of Sweden RSL, whole package test or whole test of nominated substances
- Replacement and/or retreatment of the failed component
- Retesting of the replaced and/or retreated component until a passed result is achieved
- Costs associated with any product recalls due to Tiger of Sweden RSL or SVHC failure

Tiger of Sweden expects that the supplier performs an investigation of the source of the failure to correct the current production and prevent repetition. The details of the investigation should be reported in the "RSL Corrective Action Plan", see Appendix 01, if requested by Tiger of Sweden.

Tiger of Sweden "RSL Corrective Action Plan" (CAP)
When chemical fails occur, Tiger of Sweden will request a CAP report to be performed.
The CAP report is an investigation to locate the source of the failure, and which measures to be implemented, for correction of the current production and to prevent the same failure to be repeated in future productions.
The supplier is requested to conduct the CAP report in cooperation with Tiger of Sweden and the laboratory if needed. Some parts are the supplier's responsibility to fill-in. See the CAP report in Appendix 01.

Making and implementing the CAP report will achieve internal transparency and an overview of the improvements at the supplier, which will enable Tiger of Sweden to acknowledge the efforts that supplier has accomplished before placing future orders.

Supplier Initiated Testing
Tiger of Sweden encourages suppliers to conduct their own testing to be confident in their performance and to assure compliance to Tiger of Sweden RSL. For any supplier initiated testing, the test report will only be accepted by Tiger of Sweden if testing is conducted with a nominated laboratory appointed by Tiger of Sweden using the appropriate Test Request Form. The nominated laboratories undertake full confidentiality between laboratories and suppliers.

Tiger of Sweden only accepts chemical testing conducted at a nominated laboratory for Tiger of Sweden products/components. Tiger of Sweden have evaluated and approved the nominated laboratories, and formed a set up regarding:

- Discount on prices, also valid when suppliers conduct own testing on Tiger of Sweden products
- Laboratory well informed of Tiger of Sweden RSL
- Tiger of Sweden well informed of special test methods for all laboratories
- Layout and information in reporting

Independent on the specific test method provided in Tiger of Sweden RSL, the nominated laboratory is obliged to use the latest version.

Nominated laboratory

Modern Testing Services, MTS – www.mts-global.com

- Hong Kong

See Appendix 04 for details on contact persons, locations and mailing addresses.

1.4.4 TIGER OF SWEDEN STRATEGY REGARDING NANOTECHNOLOGY

Nanotechnology based materials is generally referred to as those compounds, or components within the range of 1 to 100 nanometres, and nanomaterials are 10 times smaller than the diameter of a human hair – one nanometre is one-billionth of a meter.

Due to the uncertainty of risk associated with using nanomaterials, and to ensure that any potentially negative impact to consumers and the environment related with the use of nanomaterials are heavily reduced or even none-existing, Tiger of Sweden currently restricts the use of nanomaterials within all products. This restriction applies to final products and/or components where nanomaterials is intentionally applied to or remains as residuals after manufacturing.

Prior to the use of Nanotechnology in a specific product/component for Tiger of Sweden, the following criteria's must be met:

- Meet legislative standards, globally
- Disclose the reason for using Nanotechnology
- Disclose the use of Nanotechnology by filling out the questionnaire, see Appendix 02.
- Tiger of Sweden will, based on the given information, do a risk and toxicity review before approval.

If no information is to be given, the specific case will be considered as high risk and will not be approved.

1.4.5 TIGER OF SWEDEN TABLES OF RESTRICTED SUBSTANCES

"How to read" Tiger of Sweden tables of restricted substances

- The tables are divided into sections of Property Lending & Process Chemicals, Biocidal Agents, Restrictions on Packaging, etc.
- The substances in each section are listed in alphabetic order.
- Tiger of Sweden limits are defined with different values or expressions. The units to the values are corresponding with the units in the related test method.
- The expressions are explained in 1.4.6 Explanatory Section & Abbreviations

1.4.6 EXPALANTORY SECTION & ABBREVIATIONS

General terms	
CAP	Corrective Action Plan
ECHA	European Chemicals Agency
REACH	**R**egistration, **E**valuation, **A**uthorisation and restriction of **CH**emicals
SVHC	Substances of Very High Concern = Candidate list

Chemical terms	
Articles with direct skin contact:	*Any part of the product, such as collar, cuff, body or sleeves, has direct prolonged contact with the skin during normal use.*
Articles without direct skin contact:	*Only a portion of the product may occasionally contact the skin during normal use.*
Cas No:	*A unique numeric identifier designated to one substance by the CAS registry, Chemical Abstract Service.*
Test method:	*Standardized test method if such exists.* *Test equipment if no standardized test method exists. Abbreviations of recommended test equipment are explained in this in below section.*

Test method/equipment	
AAS:	*Atomic absorption spectrophotometer*
CI:	*Colour Index number*
DAD:	*Diode array detector*
ECD:	*Electron capture detector*
FTIR:	*Fourier transform infrared spectroscopy (for PVC test)*
GC:	*Gas Chromatography*
ICP:	*Inductively Coupled Plasma Spectrometry*
LC:	*Liquid Chromatography. Note sometimes the abbreviation HPLC is used. It stands for High Performance Liquid Chromatography*
MS:	*Mass selective detector*
OES:	*Optical emission spectrometer*
UV / VIS:	*Ultraviolet/visible spectrophotometer detector*
VOC	*Volatile Organic compound*
XRF:	*X-ray fluorescence*

Chemical limits	
Trace Amount (TR)	*The trace amount is identified by the TR designation in the Limit Value column. The trace amount is the allowable unavoidable trace presence of a substance that has been identified with a usage ban. While a substance may not be used in the production of a product, a small acceptable trace amount can be found on a RSL-compliant product due to minor contamination or atmospheric absorption.*
Detection Limit	*Specifies the test method detection sensitivity that a laboratory must be able to achieve when measuring the substance in the product.*
Limit value	*Limit value as agreed in business sectors or by legal requirements. The limit is specified as the amount of the substance found in a specified amount of substrate, by weight (or more specifically, in milligrams of the substance per kilogram of product [mg/kg]). Concentration limits are applicable to any single part, or homogeneous part, of a product.*
mg/kg	*Milligram per kilogram*
Not Detected	*Indicates that the substance must not be detected in the final product.*
N/A	*Not Applicable*
ppm	*Parts per million, which is the same as milligram per kilogram*
Reporting Limit (RL)	*The reporting limit is the lowest concentration the laboratory can report. If the laboratory detects an amount of the substance below the RL, the laboratory report must state "Not Detected."*
Usage Ban	*A substance is prohibited of intentional use during all stages of product manufacturing. However, the RSL identifies an allowable trace amount due to unavoidable contamination.*
µg/kg	*Microgram per kilogram*

Relation between Units		
1000 mg/kg Equals	*1000 ppm*	*Parts per million*
	1 000 000 µg/kg	*Micro gram per kilogram (1 µg/kg = 0,001 mg/kg = 1ppb (parts per billion)*
	0,1 % (by weight)	
	X µg/m2	*X depends on the Weight of the fabric (kg/m2)*
	X µg/cm2/week	*X is the measure of the release of a substance from a surface, and is only partly dependent on the concentration of the substance*

Miscellaneous	
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.* *For Tiger of Sweden products the article definition includes individual components in the product, e.g.:* • *Zippers, labels, buttons, and other components that are attached to the garment* • *Shoe laces, metal eyelets, shoe soles, insoles and other components that are attached to shoes, bags etc.*
Children's Products	*A children's product is that which is made for, marketed for use by, or marketed to children age 12 and under.*
Packing Material	***EU:*** *According to Directive (EC) No 94/62/EC of 20 December 1994 on packaging and packaging waste. The directive regulates substances in packaging material; meaning all products made of any materials of any nature to be used for the containment, protection, handling, delivery and presentation of goods, from raw materials to processed goods, from the producer to the user or the consumer.* ***USA:*** *Means any container providing a means of marketing, protecting, or handling a product from its point of manufacture to its sale or transfer to a consumer, including a unity package, an intermediate package or a shipping container, as defined in the ASTM specification D 996. Packaging also includes, but is not limited to, unsealed receptacles, including carrying cases, crates, crates, cups, pails, rigid foil and other trays, wrapper sand wrapping films, bags, boxes, tape, and tubs.*
Polyvinyl Chloride (PVC)	*Polyvinyl chloride, or PVC for short, is a hard plastic that may be found in packaging materials, trims, footwear, and screen printing. PVC is prohibited from use in all Tiger of Swedens packaging and food contact products. In addition, Tiger of Sweden prefers all products do not contain PVC and supports efforts to phase-out PVC.*
UV STABILISER	*UV Stabilizer's might be used as UV-protection agents in coatings, plastics, rubber and polyurethanes. The primary function is to protect the substance from the long-term UV degradation effects from ultraviolet radiation. These stabilizers are very persistent and very bio accumulative.*
pH	*pH is a measure of the acidity or basicity of a solution. A solution whose pH is 7 is said to be neutral, which means that it is neither acidic nor basic. pH values that do not fall within the specified limits can cause skin irritation.*
BIOCIDES GENERAL	*Biocides are biologically active substances, and their toxic and biocidal nature enables them to kill or harm living things. Since biocides by nature are used to have detrimental effects on biological organisms, they are at the same time a serious threat to living organisms that were not intended to be controlled. Biocides have adverse effects on the nervous system when entering the human body. They may irritate eyes, skin, and the respiratory system.*

1.4.7 TABLES OF CHEMICALS

Azo Dyes (28 restricted arylamines)				PROPERTY LENDING CHEMICALS	
Restricted Substance		**Tiger of Sweden Limit**	**Test method & Reporting limit**	**Regulation & Country**	**SVHC**
CAS No.	Substance				
101-14-4	4,4-Methylene-bis[2-chloro-aniline]		**For all markets except China:**		**X**
101-77-9	4,4-Methylenedianiline				**X**
101-80-4	4,4'-oxydianiline				**X**
106-47-8	4-chloroaniline		For textile: EN 14362-1, -3		
119-90-4	o-Dianisidine				
119-93-7	4,4'-bi-o-toluidine		For leather: ISO 17234-1, -2		
120-71-8	p-Cresidine			EU Legal limit: 1000mg/kg for Navy Blue, 30 mg/kg per each of other arylamine breakdown products, in REACH, Annex XVII, entry 43 & 72*	**X**
137-17-7	2,4,5-trimethylaniline		Reporting limit: 5 mg/kg (per each of the arylamine breakdown products)		
139-65-1	4,4'-thiodianiline				
60-09-3	4-Aminoazobenzene				**X**
615-05-4	4-methoxy-m-phenylenediamine				
838-88-0	4,4-Methylenedi-o-toluidine	20 mg/kg for each arylamine	**Products for China market:**		**X**
87-62-7	2,6-xylidine			Norway: Legal limit 30 mg/kg	
90-04-0	o-Anisidine		China standard GB 18401 For Textile: GB/T 17592	China: Legal limit: 20 mg/kg	**X**
91-59-8	2-Naphthylamine			Vietnam: Legal limit ≤ 30 g/kg	
91-94-1	3,3-Dichlorobenzidine			Japan: Legal limit ≤ 30 mg/kg	
92-67-1	Biphenyl-4-ylamine		China standard GB 20400 For Leather: GB/T 19942	India: Legal limit 30 mg/kg	**X**
92-87-5	Benzidine			Egypt: Legal limit 30 mg/kg	
95-53-4	o-Toluidine				**X**
95-68-1	2,4-xylidine		China standard GB/ 23344 for p-AAB		
95-69-2	4-Chloro-o-toluidine				
95-80-7	4-methyl-m-phenylenediamine		Reporting limit: 5 mg/kg		**X**
97-56-3	o-Aminoazotoluene				**X**
99-55-8	5-Nitro-o-toluidine				
95-79-4	2-Amino-3-Chlorotoluene**				

Continues on next page….

Azo Dyes (28 restricted arylamines) continued				PROPERTY LENDING CHEMICALS	
Restricted Substance		**Tiger of Sweden Limit**	**Test method & Reporting limit**	**Regulation & Country**	**SVHC**
106-50-3	1,4-Diaminobenzene**				**X**
3165-93-3	4-chloro-o-toluidinium chloride *				
553-00-4	2-Naphthyl-ammoniumacetate *				
39156-41-7	4-methoxy-m-phenylene diammonium sulphate; 2,4-diaminoanisole sulphate *				
21436-97-5	2,4,5-trimethylaniline hydrochloride *				
118685-33-9	Navy Blue (EC. No. 405-665-4)	1000 mg/kg	Navy Blue: EN ISO 16373		
* From 2020 these dyes will be restricted with a limit of 30 mg/kg according to REACH, Annex XVII, entry 72 ** Banned amines that are included in GOTS ver. 5.0					

Alkylphenols (AP) , Alkylphenol ethoxylates (APEO) and its derivatives				PROCESS CHEMICALS	
Restricted Substance		**Tiger of Sweden Limit**	**Test method & Reporting**	**Regulation & Country**	**SVHC**
CAS No.	Substance				
Various, incl. 68987-90-6, 9036-19-5, 9002-93-1	(OPEO) Octylphenol Ethoxylates	Usage ban Trace: 100 mg/kg for total NPEO/OPEO A total of all Aps and APEO's must not exceed: 100 mg/kg Trace: Not Detected for NP/OP Shall not be used in processes intendedly.	ISO 18254 -1, -2 (textile), APEO EN ISO 21084 (textile), AP ISO 18218-1, -2 (leather) Plastics/Polymer: THF/ ACN Extraction, Analyzed by GCMS / LCMS Reporting limit: NPEO/OPEO: 50 mg/kg NP/OP: 10 mg/kg	EU Legal limit: Shall not be placed on the market after 3 February 2021 in textile articles which can reasonably be expected to be washed in water during their normal lifecycle, in concentrations equal to or greater than 0.01% by weight of that textile article or of each part of the textile article. Exemptions: second-hand textile articles or of new textile articles produced, without the use of NPE, exclusively from recycled textiles. NP is in REACH, Annex XVII, entry 46 NPEO is in REACH Annex XVII, entry 46a with restriction on textiles intended to be washed in water during its lifecycle with a legal limit of 100mg/kg, effective Feb 2021	**X**
Various, incl. 9016-45-9, 26027-38-3, 37205-87-1, 68412-54-4, 127087-87-0	(NPEO) Nonylphenol Ethoxylates				**X**
Various, incl. 27193-28-8, 140-66-9, 1806-26-4, 85771-77-3	(OP) Octylphenol				**X**
Various including 25154-52-3, 104-40-5, 84852-15-3, 11066-49-2	(NP) Nonylphenol				**X**
Various	Tris(4-nonylphenyl, branched and linear) phosphite(TNPP) with≥ 0.1% w/w of4-nonylphenol, branched and linear(4-NP)				**X**
Various	4-heptylphenol, branched and linear		THF/ ACN Extraction, Analyzed by GCMS / LCMS		**X**
80-46-6	p-(1,1-dimethylpropyl) phenol				**X**
98-54-4	4-tert-butylphenol				**X**

Allergenic Disperse Dyes				PROPERTY LENDING CHEMICALS
Restricted Substance		**Tiger of Sweden Limit**	**Test method & Reporting limit**	**Regulation & Country**
CAS No.	Substance	Usage Ban Trace: 50mg/kg (3,3mg/L)	DIN 54231 (qualitative) EN ISO 16373 (extractable dyestuff) Reporting limit: 1 mg/l per substance	Germany, South Korea and practically globally due the fact that nearly all brands and retailers have these on their RSL´s. South Korea: restriction limit 50mg/kg (Equals 3,3mg/L under DIN 54231)
2475-45-8	Disperse Blue 1*			
2475-46-9	Disperse Blue 3*			
3179-90-6	Disperse Blue 7			
3860-63-7	Disperse Blue 26			
12222-75-2	Disperse Blue 35*			
12222-97-8	Disperse Blue 102			
12223-01-7	Disperse Blue 106*			
61951-51-7	Disperse Blue 124*			
23355-64-8	Disperse Brown 1			
2581-69-3	Disperse Orange 1			
730-40-5	Disperse Orange 3*			
12223-33-5 13301-61-6	Disperse Orange 37/59/76*			
2872-52-8	Disperse Red 1*			
2872-48-2	Disperse Red 11			
3179-89-3	Disperse Red 17			
119-15-3	Disperse Yellow 1			
2832-40-8	Disperse Yellow 3*			
6373-73-5	Disperse Yellow 9			
12236-29-2	Disperse Yellow 39			
54824-37-2	Disperse Yellow 49			
6250-23-3	Disperse Yellow 23			
85136-74-9	Disperse Orange 149			
* Disperse Dyes Banned in Germany according to: LFBG § 30 of Food and Commodities Act				

Bisphenols				PROCESS CHEMICAL	
Restricted Substance		**Tiger of Sweden Limit**	**Test method & Reporting limit**	**Regulation & Country**	**SVHC**
CAS No.	Substance	Should not be present in products	pr ISO 11936 (leather) No standardised test method for textile available. LC-MS, GC-MS.	Bisphenol A (BPA) is restricted in REACH (Annex XVII, entry 66 in thermal paper Also used in the production of epoxy resin, polycarbonate plastics, flame retardants and PVC	**X**
80-05-7	Bisphenol A; BPA (4,4'-isopropyllidenediphenol)				
6807-17-6	Bisphenol A; BPA 2,2-bis(4'-hydroxyphenyl)-4-methylpentane				**X**
77-40-7	Bisphenol B (4,4'-(1-methylpropylidene)bisphenol)				**X**
80-09-1	Bisphenol S (4,4'-sulphonyldiphenol)				**X**

Blowing agents				PROCESS CHEMICAL	
Restricted Substance		**Tiger of Sweden Limit**	**Test method & Reporting limit**	**Regulation & Country**	**SVHC**
CAS No.	Substance	200 ppm	No standardised test method available for textiles. Test equipment: GC-MS, LC-MS LOQ: 200 mg/kg	Candidate list of Substances of Very High Concern (SVHC) for the authorization of the Regulation (EC) No 1907/2006 of the European Parliament of the Council (REACH).	**X**
123-77-3	C,C'-azodi(formamide) (ADCA)				
302-01-2, 7803-57-8	Hydrazine				**X**

Carcinogenic Dyestuffs				PROPERTY LENDING CHEMICALS	
Restricted Substance		**Tiger of Sweden Limit**	**Test method & Reporting limit**	**Regulation & Country**	**SVHC**
CAS No.	Substance	Usage Ban Trace: 50mg/kg (3,3mg/L)	DIN 54231 (qualitative) EN ISO 16373 (extractable dyestuff) Reporting limit: 1 mg/l per substance	South Korea: restriction limit 50mg/kg (Equals 3,3mg/L under DIN 54231)	
2475-45-8	Disperse Blue 1* & **				
82-28-0	Disperse Orange 11				
6250-23-3	Disperse Yellow 23				
3761-53-3	Acid Red 26				
569-61-9	Basic Red 9 **				
632-99-5	Basic Violet 14				
1937-37-7	Direct Black 38				**X**
2602-46-2	Direct Blue 6				
573-58-0	Direct Red 28				**X**
16071-86-6	Direct Brown 95				
85136-74-9	Disperse Orange 149				
6786-83-0	Solvent Blue 4				**X**
2580-56-5	Basic Blue 26				**X**
548-62-9	Basic Violet 3 **				**X**
101-61-1	Michler's base				**X**
561-41-1	4,4'-bis(dimethylamino)-4"-(methylamine)trityl alcohol				**X**
* Disperse Dyes Banned in Germany according to: LFBG § 30 of Food and Commodities Act ** From 2020 these dyes will be restricted with a limit of 30 mg/kg according to REACH, Annex XVII, entry 72					

Diisocyanates			PROCESS & PROPERTY LENDING CHEMICALS & RELATED MANUFACTURING IMPURITIES	
Restricted Substance		**Tiger of Sweden Limit**	**Test method & Reporting limit**	**Regulation & Country**
CAS No.	Substance	Free: 1 Blocked: 50	Free: Solvent extraction analysis by HPLC. Blocked: Solvent extraction by GC-MS with injector block temperature of 300 °C. If detected, confirmation test at 180°C is needed to avoid false positive detection of diisocyanate from polyurethane decomposition in injector block of GC/MS device.	Methylene diphenyl diisocyanate (MDI) and its isomers is restricted when used as a component of consumer products in REACH Annex XVII, Entry 56
101-68-8	(MDI) Diphenylmethane diisocyanate			
822-06-0	(HDI) Hexamethylene diisocyanate	Free: 1 Blocked: 100		
4098-71-9	(IPDI) Isophorone diisocyanate	Free: 1 Blocked: 100		
2778-42-9	(TMXDI) Tetramethylxylene diisocyanate	Free: 1 Blocked: 15		
584-84-9	(TDI) Toluene diisocyanate	Free: 1 Blocked: 50		

Flame Retardants				PROPERTY LENDING CHEMICALS	
Restricted Substance		**Tiger of Sweden Limit**	**Test method & Reporting limit**	**Regulation & Country**	**SVHC**
Polybrominated biphenyls (PBB) and Polybrominated diphenyl ethers (PBDE)					
CAS No.	Substance	Usage Ban Trace: 1 mg/kg	EN 16377 for PBB (Plastics) EN ISO 17881-1 for brominated flame retardants in textiles;	PBBs are in REACH, Annex XVII, entry 8. OctaBDE & DecaBDE are listed in REACH, Annex XVII, entry 45 & 67 Banned in REACH Regulation (EC) No 756/2010. Commercial TetraBDE, PentaBDE, HexaBDE, HeptaBDE, DecaBDE (sum 500 ppm in products) and Hexabromobiphenyl (ban) are listed in the Stockholm Convention on Persistent Organic Pollutants (POPs) and banned by Regulation (EC) No 2019/1021.	
59536-65-1	(PBBs) Polybrominated biphenyls				
5436-43-1	Tetrabromodiphenyl ether (TetraBDE)	Usage Ban Trace: 5 mg/kg			
32534-81-9	(PentaBDE) Penta-bromodiphenyl ether				
68631-49-2, 207122-15-4	Hexabromodiphenyl ether (HexaBDE)				
446255-22-7 207122-16-5	Heptabromodiphenyl ether (HeptaBDE)				
32536-52-0	(OctaBDE) Octa-bromodiphenyl ether				
1163-19-5	(DecaBDE) Decabromodiphenyl ether				**X**
Chlorinated paraffins					
CAS No.	Substance	Usage Ban Trace: 0.1 % by weight	EN ISO 18219:2016 Reporting limit: 100 mg/kg	SCCP is listed in POPs* and banned by Regulation (EC) No 850/2004**. Norway has a national legislation from 1 July 2012 with restrictions for Medium- chain (C14-C17) chloroparaffins of 0.1 % by weight in articles.	
85535-84-4	(SCCP) Short-chain chloroparaffins, (C10-C13)				**X**
85535-85-9	(MCCP) Medium-chain chloroparaffins, (C14-C17)				
85535-86-0	(LCCP) Long-chain chloroparaffins (C18-)				

Flame Retardants – continued..				PROPERTY LENDING CHEMICALS	
Restricted Substance		**Tiger of Sweden Limit**	**Test method & Reporting limit**	**Regulation & Country**	**SVHC**
Others					
CAS No.	Substance	Usage Ban Trace: 5 mg/kg	EN ISO 17881- 1 for brominated flame retardants	HBCDD is listed in POP* and banned by Regulation (EC) No 850/2004** Legal limit: 0.01% by weight HBCDD and all major isomers are in REACH, Annex XIV.	**X**
25637-99-4, 3194-55-6, 134237-50-6, 134237-51-7, 134237-52-8	(HBCDD) Hexabromocyclododecane				
78-30-8	Tri-o-cresyl phosphate		EN ISO 17881- 2 for phosphorous flame retardants		
126-72-7	(TRIS) Tris (2,3-dibromopropyl) phosphate			TRIS is in REACH, Annex XVII, entry 4.	
5412-25-9	(BDBPP) Bis (2,3-dibromopropyl) phosphate				
115-96-8	(TCEP) Tris(2-chloroethyl)phosphate				**X**
545-55-1	(TEPA) Tris (1-aziridinyl)-phosphine oxide		KOH or NaOH digestion followed by GC-MS headspace analysis for ethyleneimine.	TEPA is in REACH, Annex XVII, entry 7.	
25155-23-1	(TXP) Trixylyl phosphate		EN ISO 17881- 2 for phosphorus flame retardants		**X**
26040-51-7	Bis(2-ethylhexyl) tetrabromophthalate (TBPH)		GC-MS, LC-MS, GC-ECD, XRF to detect bromine		**X**
*POP is the Stockholm Convention on Persistent Organic Pollutants **Regulation (EC) No 850/2004 (EU regulation implementing Stockholm Convention).					

Boric acid, borate compounds*					**PROPERTY LENDING CHEMICALS**
Restricted Substance		**Tiger of Sweden Limit**	**Test method & Reporting limit**	**Regulation & Country**	**SVHC**
CAS No.	Substance	Usage ban	1) AAS 2) ICP-MS and ICP-OES Reporting limit: 1) 1000 µg/kg as Boron 2) 100 µg/kg as Boron	Legal limit: 1000 mg/kg or 0.1% by weight	
10043-35-3 11113-50-1	Boric acid				**X**
1303-96-4 1330-43-4 12179-04-3	Disodium tetraborate anhydrous				**X**
12267-73-1	Tetraboron disodium heptaoxide hydrate				**X**
234-390-0	Sodium perborate; perboric acid, sodium salt				**X**
7632-04-04	Sodium peroxometaborate				**X**
12008-41-2	Disodium octaborate,				**X**
13840-56-7	Orthoboric acid, sodium salt, e.g.				**X**
13701-59-2	Barium diboron tetraoxide,				**X**
*Commonly found in Wood material in packaging.					

Formaldehyde				PROPERTY LENDING CHEMICALS
Restricted Substance		**Tiger of Sweden Limit**	**Test method & Reporting limit**	**Regulation & Country**
CAS No.	**Substance**	Children < 3 yrs.: Not Detected Adults with direct skin contact*: 75 mg/kg Adults without direct skin contact**: 300 mg/kg	EN ISO 14184-1(textiles) ISO 17226-1 (leather, HPLC analysis) ISO 17226-2 (leather, colorimetric analysis) ISO 17226-3 (leather, VOC analysis) ISO 27587 (leather, process auxiliaries) Test method specified in Japan law 112 LOQ: 16 mg/kg Reporting limit: 16 mg/ kg Wood & wood-based materials: EN 120	See "Formaldehyde regulations worldwide" for textiles below. Formaldehyde will be added to REACH, Annex XVII, entry 72. Refer to footnote ***
50-00-0	Formaldehyde			

* Products for adults where any part of the product such as collar, cuff, body or sleeves, has direct prolonged contact with the skin during normal use.
** Products for adults where only a portion of the product, occasionally may have contact with the skin during normal use.
*** From 2020, formaldehyde will have a restriction limit of 75 mg/kg in textiles according to Annex XVII, entry 72 of Regulation (EC) No 1907/2006 of the European Parliament and of the Council (REACH). During a transition period, jackets, coats or upholstery will have a restriction limit of 300 mg/kg.

Formaldehyde regulations worldwide		
Country	Regulations/Requirements	Objection Limit / Limit
Germany	Gefahrstoffverordnung (Hazardous Substances Ordinance) Annex III, No. 9, 26.10.1993	Textiles that normally come into contact with the skin and release more than 1500 mg/kg formaldehyde must bear the label:" Contains formaldehyde". Washing this garment is recommended prior to first time use in order to avoid irritation of the skin."
France	Official Gazette of the French Republic, Notification 97/0141/F	The regulations apply to products that are intended to come into contact with human skin, Including: textiles, leather, shoes etc. Textiles for babies: 20 mg/kg. Textiles in direct skin contact: 100 mg/kg. Textiles not in direct skin contact: 400 mg/kg.
Netherlands	The Dutch (Commodities Act) Regulations on Formaldehyde in Textiles (July 2000)	Textiles in direct skin contact must be labelled:" Wash before first use" if they contain more than 120 mg/kg formaldehyde and the product must not contain more than 120 mg/kg formaldehyde after wash
Austria	Formaldehydverordnung, BGBL Nr. 194/1990	Textiles that contains 1500 mg/kg or above must be labelled.
Finland	Decree on Maximum Amounts of Formaldehyde in Certain Textiles Products (Decree 210/1988)	Textiles for babies under 2 years: 30 mg/kg. Textiles in direct skin contact: 100 mg/kg. Textiles not in direct skin contact: 300 mg/kg.
Norway	Regulations Governing the Use of a Number of Chemicals in Textiles (April 1999)	Textiles for babies under 2 years: 30 mg/kg. Textiles in direct skin contact: 100 mg/kg. Textiles not in direct skin contact: 300 mg/kg.
China	Limits of Formaldehyde Content in Textiles: GB18401, Leather: GB/T 19941	Textiles for infants and babies: ≤20 mg/kg. Textiles in direct skin contact: ≤75 mg/kg. Textiles not in direct skin contact: ≤300 mg/kg.
Japan	Japanese Law 112 Textiles: JIS L1041	Textiles for infants: Not detectable. Textiles in direct skin contact: 75 ppm.
Vietnam	Circular no 23/2016/TT-BCT	Textiles for babies under 36 months: 30 mg/kg. Textiles in direct skin contact: 75 mg/kg. Textiles not in direct skin contact: 300 mg/kg

Melamine					
Restricted Substance		**Tiger of Sweden Limit**	**Test method & Reporting**	**Regulation & Country**	**SVHC**
CAS No.	**Substance**	Should not be present in products.	No standardized test method available. Test equipment LC-MS, GC-MS.	Included in the Candidate list of Substances of Very High Concern (SVHC) for the authorization of the Regulation (EC) No 1907/2006 of the European Parliament of the Council (REACH).	**X**
108-78-1	Melamine				

Metal Restrictions – Textile & Leather						PROPERTY LENDING CHEMICALS
Restricted Substance		**Tiger of Sweden Limit (mg/kg)**		**Test method & Reporting limit**	**Regulation & Country**	**SVHC**
Extractable Metals		**Textile (natural & synthetic, artificial leather)**	**Leather (natural & coated)**			
CAS No.	Substance			**Metal chromium (Cr) may be analysed by:** EN 16711-1 (total content in textiles and accessories) EN 16711-2 (extractable content in textile and accessories) ISO 17072-1 (extractable content in leather) ISO 17072-2 (total content in leather) LOQ 10 mg/kg (total contant) LOQ 0,1 mg/kg (extractable contant) **Cr^{+6} :** ISO 17075 -1, -2 (leather). EN ISO 10195 (pre-aged leather) No standardised test method available for textiles.UV-VIS Spectrometer Reporting limit: 0.5 mg/kg		
7440-36-0	(Sb) Antimony	30	30			
7440-38-2	(As) Arsenic *	1	1		In REACH, Annex XVII, entry 19 *	**X****

7440-43-9	(Cd) Cadmium *	0.1	0.1	**Textile:** EN ISO 105-E04 Determination: ICP-MS **Leather:** EN ISO 17072-1 & 17072-2 Reporting limit: 3 mg/kg	In REACH, Annex XVII, entry 23 *	**X****
7440-47-3	(Cr) Chromium	2	200			
18540-29-9	(Cr^{+6}) Chromium VI *	Not Detected Trace: 0.5	Not Detected Trace: 3		In REACH, Annex XVII, entry 47 *	
7440-48-4	(Co) Cobalt	4	4			
7440-50-8	(Cu) Copper	50	50			
7439-92-1	(Pb) Lead *	1	1		In REACH, Annex XVII, entry 63 * Danish Regulation for lead.	**X****
7439-97-6	(Hg) Mercury	0.02	0.02		In REACH, Annex XVII, entry 18A	
7782-49-2	(Se) Selenium	N/A	N/A			
7440-02-0	(Ni) Nickel	4	1			

* From 2020, Arsenic and its compounds, Cadmium and its compounds, Lead and its compounds, Chromium VI compounds will have a restriction of 1 mg/kg (extractable content) in textiles according to Annex XVII, entry 72 of Regulation (EC) No 1907/2006 of the European Parliament and of the council (REACH)
** Various Arsenic, Cadmium and Lead compounds are listed in the SVHC Candidate list of REACH.

Metal Restrictions – Textile & Leather					**PROPERTY LENDING CHEMICALS**	
Restricted Substance		**Tiger of Sweden Limit (mg/kg)**		**Test method & Reporting limit**	**Regulation & Country**	**SVHC**
Total Metal Content		**Textile (natural & synthetic, artificial leather)**	**Leather (natural & coated)**			
CAS No.	Substance			EN 1122 or acid digestion	In REACH, Annex XVII, entry 23	**X**
7440-43-9	(Cd) Cadmium	N/A	100			
7439-92-1	(Pb) Lead	N/A	90	ASTM F2853 in paint and surface coating CPSC-CH-E1001-08 in metal CPSC-CH-E1002-08 in non-metal CPSC-CH-E1003-09 in paint & surface coating	In REACH, Annex XVII, entry 63 Danish Regulation for lead must always be considered.	**X**

* Cr+6 testing must always be conducted WITH AGEING (80^0C, <5% humidity, 24 hours

Metal Restrictions – Metal & Plastic (trims, buckles, sundries* etc.)					PROPERTY LENDING CHEMICALS	
Restricted Substance		**Tiger of Sweden Limit (mg/kg)**		**Test method & Reporting limit**	**Regulation & Country**	**SVHC**
Extractable Metals		**Children (< 12 yrs)**	**Adult**			
CAS No.	Substance			Metal & Plastic: Total heavy metal screening refers to: ASTM F963, when positive use EN71-3 (EU Toy Safety Directive)		
7440-36-0	(Sb) Antimony	60	N/A			
7440-38-2	(As) Arsenic	25	N/A		In REACH, Annex XVII, entry 19	
7440-39-3	(Ba) Barium	1000	N/A			
7440-43-9	(Cd) Cadmium**	17	75		In REACH, Annex XVII, entry 23	**X**
7440-47-3	Chromium III	60	N/A			
7440-47-3	Chromium VI	0.2	N/A			

Metal Restrictions – Metal & Plastic - continued…					PROPERTY LENDING CHEMICALS	
Restricted Substance		**Tiger of Sweden Limit (mg/kg)**		**Test method & Reporting limit**	**Regulation & Country**	**SVHC**
7439-92-1	(Pb) Lead	90	90	See above	In REACH, Annex XVII, entry 63, for Jewelry & Accessories. Danish Regulation for lead must always be considered	**X**
7439-97-6	(Hg) Mercury	60	N/A		In REACH, Annex XVII, entry 18A	
7440-02-0	Nickel release***	**Metal parts in direct & prolonged skin contact**. Maximum release: 0,5 µg/cm²/week (non-pierced) 0,2 µg/cm²/week (pierced)		Nickel release: EN 1811**** EN 16128*****	In REACH, Annex XVII, entry 27	
Total Metal Content		**Children (< 12 yrs.)**	**Adult**			
CAS No.	**Substance**			EN 1122 or acid digestion	In REACH, Annex XVII, entry 23.	**X**
7440-43-9	(Cd) Cadmium**	100	100			

7439-92-1	(Pb) Lead	90	90	ASTM F2853 in paint and surface coating CPSC-CH-E1001-08 in metal CPSC-CH-E1002-08 in non-metal CPSC-CH-E1003-09 in paint & surface coating	In REACH, Annex XVII, entry 63 for Jewelry & Accessories Danish Regulation for lead must always be considered	**X**

* Sundries: Items that are permanently attached to the garment/footwear. Includes zippers, rivets, buttons, care labels, name labels, and tags.
** Not applicable for inorganic glass.
*** Nickel release restriction includes all metal trims and jewelry that are in direct and prolonged skin contact.
**** For metal parts with surface coating, perform abrasion of coated surface according to EN 12472:2005+A1:2009 before Nickel release according to EN 1811:2011+A1:2015. For non-coated items: EN 1811:2011+A1:2015
***** For spectacle frames and sunglasses, test according to EN 16128.

Metal Restrictions – Jewelry			PROPERTY LENDING CHEMICALS		
Restricted Substance		Tiger of Sweden Limit (mg/kg)	Test method & Reporting limit	Regulation & Country	SVHC
Extractable Metals		**Adult***			
CAS No.	Substance		Metal & Plastic: Total heavy metal screening refers to: ASTM F963, when positive use EN71-3 (EU Toy Safety Directive)		
7440-36-0	(Sb) Antimony	60			
7440-38-2	(As) Arsenic	25		In REACH, Annex XVII, entry 19	
7440-39-3	(Ba) Barium	1000			
7440-43-9	(Cd) Cadmium**	75		In REACH, Annex XVII, entry 23.	**X**
7440-47-3	Chromium	60			
7439-92-1	(Pb) Lead	50		In REACH, Annex XVII, entry 63 for Jewelry & Accessories. Danish Regulation for lead must always be considered	**X**
7439-97-6	(Hg) Mercury	60		In REACH, Annex XVII, entry 18A.	
7782-49-2	(Se) Selenium	500			
7440-02-0	Nickel release***	**Metal parts in direct & prolonged skin contact**. Maximum release: 0,5 µg/cm²/week (non-pierced) 0,2 µg/cm²/week (pierced)	Nickel release: EN 1811**** EN 16128*****	In REACH, Annex XVII, entry 27.	
Total Metal Content		**Adult***			
CAS No.	Substance		EN 1122 or acid digestion	In REACH, Annex XVII, entry 23.	**X**
7440-43-9	(Cd) Cadmium**	75			
7439-92-1	(Pb) Lead	40	ASTM F2853 in paint and surface coating CPSC-CH-E1001-08 in metal CPSC-CH-E1002-08 in non-metal CPSC-CH-E1003-09 in paint & surface coating	In REACH, Annex XVII, entry 63 for Jewelry & Accessories. Danish Regulation for lead must always be considered	**X**

* Limits only valid for products for adults.
** Not applicable for inorganic glass
*** Nickel release restriction includes all metal trims and jewelry that are in direct and prolonged skin contact.
**** For metal parts with surface coating, perform abrasion of coated surface according to EN 12472:2005+A1:2009 before Nickel release according to EN 1811 :2011+A1:2015. For non-coated items: EN 1811:2011+A1:2015.
***** For spectacle frames and sunglasses, test according to EN 16128.

Monomers					
Restricted Substance		**Tiger of Sweden Limit (mg/kg)**	**Test metho**	**Regulation & Country**	**SVHC**
CAS No.	Substance		Validated Method, Headspace GC/MS Identificati on.		
79-06-1	Acrylamide	0.1			**X**
107-13-1	Acrylonitrile	1			
106-99-0	1,3-Butadiene	1			
141-32-2	Butylacrylate	50			
97-88-1	Butylmethacrylate	50			
126-99-8	Chloroprene, 2-chlorobuta-1,3-diene	50			
563-47-3	3-chloro-2-methylpropene	10			
100-45-8	4-Cyanocyclohexene	50			
103-11-7	2-Ethylhexyl acrylate	50			
4994-16-5	4-Phenylcyclohexene	50			
140-88-5	Ethylacrylate	10			
97-63-2	Ethylmethacrylate	50			
79-39-0	Methacrylamide	50			
96-33-3	Methylacrylate	50			
80-62-6	Methylmethacrylate	50			
924-42-5	N-Methylolacrylamide	5			
100-42-5	Styrene	500			
100-40-3	4-Vinylcyclohexene	50			
924-42-5	N-(hydroxymethyl)acrylamide	500		Included in the Candidate list of Substances of Very High Concern (SVHC) for the authorization of the Regulation (EC) No	**X**
75-01-4	Vinyl chloride	1	EN ISO 6401		

N-Nitrosamines*, 9 kinds				PROCESS CHEMICALS
Restricted Substance		**Tiger of Sweden Limit**	**Test method & Reporting limit**	**Regulation & Country**
CAS No.	Substance	Usage Ban Trace: 0.5 mg/kg for each	GB/T 24153-2009** Determination using GC/MS, with LC/MS/MS/MS verification if positiv Alternatively, LC/MS/MS may be performed on it own prEN 19577:2017	Regulated in China***
62-75-9	N-Nitrosodimethylamine			
55-18-5	N-nitrosodiethylamine			
621-64-7	N-nitrosodipropylamine			
924-16-3	N-nitrosodibutylamine			
100-75-4	N-nitrosopiperidine			
930-55-2	N-nitrospyrrolidine			
59-89-2	N-nitrosomorpholine			
614-00-6	N-nitroso-N-methylaniline			
612-64-6	N-nitroso-N-ethylaniline			
* Most common in Shoe Sole Materials (Rubber). **GB/T 24153-2009 "Rubber and elastomer materials – Determination of N-nitrosamines" ***GB25038-2010 " Rubber shoes healthy and safety specification and GB25036-2010 " Children's Canvas Rubber Footwear"				

Perfluorinated and Polyfluorinated Chemicals (PFCs)				PROPERTY LENDING CHEMICALS	
Restricted Substance		Tiger of Sweden Limit	Test method & Reporting limit	Regulation & Country	SVHC
CAS No.	Substance			See regulation on next page.	
29420-49-3 220689-12-3	Highly fluorinated sulfonic acids and related substances, including PFOS Perfluorooctane sulphonate and PFOS metallic salt, halogenide, amide and other derivatives. See next page for substances.	Usage Ban	EN/TS 15968 EN 17681-1, 2 (textile and textile products) Test equipment: LC-MS LOQ: 0.1 µg/m²		**X**
Various	Highly fluorinated carboxylic acids and related substances, including PFOA Perfluorooctanoic acid, its salts and esters. See next page for substances.	Usage Ban	EN 17681-1, 2 (textile and textile products) ISO 23702-1 (leather) Test equipment: LC-MS LOQ: 0.1 µg/m2		**X**
Various	Highly fluorinated ethers and related substances, including HFPO-DA and its salts. See next page for substances.	Usage Ban	EN 17681-1, 2 (textile and textile products) Test equipment: LC-MS LOQ: -		**X**

Cont. Perfluorinated and Polyfluorinated Chemicals (PFCs) regulation & country	PROPERTY LENDING CHEMICALS
PFOS - Legal limit: Shall not occur PFOS and its derivatives are listed in the Stockholm Convention on Persistent Organic Pollutants (POPs) and banned in EU by the POPs Regulation (EU) No 2019/1021. Residues below the following limits are allowed to be placed on the market and used, as these are the amounts that may be present as impurity6 : 1 µg/m2 applies to coated textiles and leather products. 0.1% by weight applies to articles or part of articles. Perfluorobutane sulfonic acid (PFBS) and its salts (e.g. 29420-49-3 and 220689-12-3), Perfluorohexane-1-sulphonic acid and its salts (PFHxS), are listed on the Candidate List of Substances of Very High Concern for authorization of the Regulation (EC) No 1907/2006 (REACH). Declaration duty in Sweden from 1 January 2019 to the Swedish Chemicals Agency for PFAS in chemical products that are deliberately added. Composition needs not to be specified but the information duty applies without any concentration limit. Prop 65: PFOS is known to the State of California to cause birth defects or other reproductive harm. Perfluorooctane Sulfonic Acid (PFOS) and Its Salts and Transformation and Degradation Precursors are known to the State of California to cause cancer. Safe Harbor Limit: None. No information on settlements.	
PFOA - Legal limit: Shall not occur. PFOA, its salts and related compounds are listed in the Stockholm Convention on Persistent Organic Pollutants (POPs) and banned in EU by the POPs Regulation (EU) No 2019/1021. Residues below 0.025 mg/kg of each substance, and 1 mg/ kg of a combination of PFOA-related substances in substances, mixtures, and articles are allowed to be placed on the market and used, as these are amounts that may be present as impurities. From 4 July 2023 the restriction applies to textiles for the protection of workers from dangerous liquids. C9-C14 linear and/or branched perfluorocarboxylic acids (C9- C14 PFCAs), their salts and C9-C14 PFCAs-related substances, are restricted in articles (25 ppb) annex XVII Regulation (EC) No 1907/2006 (REACH), entry 68. Perfluoroheptanoic acid and its salts as well as other PFCAs including their salts (sodium and ammonium) and precursors are also listed in the Candidate List of Substances of Very High Concern for authorization of Regulation (EC) No 1907/2006 (REACH). Examples of PFCAs are listed as: Ammonium perfluoroheptanoate, 6130-43-4, Potassium perfluoroheptanoate, 21049-36-5, Perfluoroheptanoic acid, 375-85-9, Sodium perfluoroheptanoate, 20109-59-5, (C8) Pentadecafluorooctanoic acid (PFOA) and its ammonium salt (APFO), 335-67-1,3825-26-1, (C9) Perfluorononan-1-oic-acid (PFNA) and its sodium and ammonium salts, 375-95-1, 21049-39-8, 4149-60-4, (C10) Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts, 335-76-2, 3108-42-7, 3830-45-3, (C11) Henicosafluoroundecanoic acid (PFUnA), 2058-94-8, (C12) Tricosafluorododecanoic acid (PFDoA), 307-55-1, (C13) Pentacosafluorotridecanoic acid (PFTrDA), 72629-94-8, - (C14) Heptacosafluorotetradecanoic acid (PFTA), 376-06-7, 376-06-7, (3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl) silanetriol is restricted in spray products (2 ppb) annex XVII Regulation (EC) No 1907/2006 (REACH), entry 73. Declaration duty in Sweden to the Swedish Chemicals Agency for PFAS in chemical products that are deliberately added. Composition needs not to be specified but the information duty applies without any concentration limit. In California: PFOA and perfluorononanoic acid (PFNA) and its salts are listed in Proposition 65.	

HFPO-DA, its salts and its acyl halides (CAS 13252-13-6, 67118- 55-2, 2062-98-8 and 62037-80-3) are listed in the Candidate List of Substances of Very High Concern for authorization of Regulation (EC) No 1907/2006 of the European Parliament and of the Council (REACH).

Declaration duty in Sweden from 1 January 2019 to the Swedish Chemicals Agency for PFAS in chemical products that are deliberately added. Composition needs not to be specified but the information duty applies without any concentration limit.

Prop 65: Highly fluorinated ethers are not listed under Proposition 65

*POPs are the Stockholm Convention on Persistent Organic Pollutants
**Regulation (EC) No 850/2004 (EU regulation implementing Stockholm Convention).
***The restriction applies to both solid and liquid products, including textiles.

Polycyclic Aromatic Hydrocarbons (PAH's)

PROPERTY LENDING CHEMICALS

Restricted Substance		Tiger of Sweden Limit	Test method & Reporting limit	Regulation & Country	SVHC
PAH – Impurities					
CAS No.	Substance	Sum of all PAH's: 1 mg/kg Toys & childcare articles: 0,5 mg/kg of any of the listed PAHs	ISO 2146 (NMR) AfPS GS 2014-01 PAK ISO/TS 16190 (footwear) Reporting limit: 0.2 mg/kg	BaP, BeP, BaA, CHR, BbFA, BjFA, BkFA, DBAhA, in REACH, Annex XVII, entry 50, regulated for car tires and consumer products such as clothing, footwear, gloves, sportswear, head-bands, watch- straps and wrist-bands*	
50-32-8	(BaP) Benzo[a]pyrene*				**X**
192-97-2	(BeP) Benzo[e]pyrene*				
56-55-3	(BaA) Benzo[a]anthracene*				**X**
218-01-9	(CHR) Chrysene*				**X**
205-99-2	(BbFA) Benzo[b]fluoranthene*				
205-82-3	(BjFA) Benzo[j]fluoranthene*				
207-08-9	(BkFA) Benzo[k]fluoranthene*				
53-70-3	(DBAhA) Dibenzo[a,h]anthracene*				
83-32-9	Acenaphthene	Direct & Prolonged Skin contact** Sum of all PAH's: 10 mg/kg BaP: < 1 mg/kg No Direct Skin contact*** Sum of all PAH's: 200 mg/kg BaP < 20 mg/ kg			
208-96-8	Acenaphthylene				
120-12-7	Anthracene				**X**
191-24-2	Benzo[ghi]perylene				**X**
206-44-0	Fluoranthene				
86-73-7	Fluorene				
193-39-5	Indeno[1,2,3-cd]pyrene				
91-20-3	Naphthalene****				
85-01-8	Phenanthrene				
129-00-0	Pyrene				**proposed**

* A restriction of 1 mg/kg per PAH for consumer products came into force the 27th of December 2013 with a 2-year phase out → Now in force. From 2020 these will have a restriction limit of 1 mg/kg for textiles according to REACH, Annex XVII, entry 72
**This restriction should apply to those parts of articles that come into direct and prolonged contact with the skin or the oral cavity under normal conditions of use.
*** This restriction should apply to articles or parts which are only in short or infrequent contact with the skin or oral cavity under normal conditions of use.
**** Naphthalene alone should not be considered as PAH but as a VOC with the limit of 200 mg/kg

Polycyclic Aromatic Hydrocarbons (PAH's) - continued				PROPERTY LENDING CHEMICALS	
Restricted Substance		**Tiger of Sweden Limit**	**Test method & Reporting limit**	**Regulation & Country**	**SVHC**
PAH – Oil Mixtures					
CAS No.	Substance	Sum of all PAH's: 50 mg/kg	Solvent extraction / GC-MS or HPLC-DAD Reporting limit: 0.1 mg/kg		
90640-80-5	Anthracene oil				**X**
91995-17-4	Anthracene oil, anthracene paste, distn. Lights				**X**
91995-15-2	Anthracene oil, anthracene paste, anthracene fractions				**X**
90640-82-7	Anthracene oil, anthracene-low				**X**
90640-81-6	Anthracene oil, anthracene paste				**X**

Phthalates				PROPERTY LENDING CHEMICALS	
Restricted Substance		**Tiger of Sweden Limit**	**Test method & Reporting limit**	**Regulation & Country**	**SVHC**
CAS No.	Substance	Should not be present in products The sum of esters of ortho-phthalic acid must not exceed: 0.1 % by weight	EN/ISO 14389 (textile) ISO 16181 -1, -2 (footwear) GC-MS, LC-MS USA: CPSC-HC-C1001-09.3 Reporting limit:	EU: 0.1% by weight of the plasticized material in toys and childcare articles which can be placed in the mouth. BBP, DBP, DEHP, DINP, DIDP and DNOP are listed in REACH, Annex XVII, entry 51 & 52. BBP, DBP, DEHP and DIBP are listed in REACH, Annex XIV.	
85-68-7	(BBP) Butyl benzyl phthalate				**X**
84-74-2	(DBP) Dibutyl phthalate				**X**
117-81-7	(DEHP) Di(ethylhexyl) phthalate				**X**
84-66-2	(DEP) Diethyl phthalate				
68515-42-4	(DHNUP) 1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters				**X**
84-69-5	(DIBP) Di-iso-butyl phthalate				**X**
26761-40-0 68515-49-1	(DIDP) Di-isodecyl phthalate				

71888-89-6	(DIHP) 1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich *	Should not be present in products The sum of esters of ortho-phthalic acid must not exceed: 0.1 % by weight	50 mg/kg for each phthalate	Also see footnote * All phthalates in toys and childcare articles for children age 0-3 years are restricted (0,05%) in Denmark (BEK nr 855) From 7 July 2020, 0.1% by weight of the plasticized material in all articles for DEHP, DBP, BBP and DIBP.	**X**
28553-12-0 68515-48-0	(DINP) Di-isononyl phthalate				
605-50-5	(DIPP) Di-isopentyl phthalate *				**X**
117-82-8	(DMEP) Di-(2-methoxyethyl) phthalate *				**X**
131-11-3	(DMP) Dimethyl phthalate				
84-75-3	(DnHP) Di-n-hexyl phthalate *				**X**
117-84-0	(DNOP) Di-n-octyl phthalate				
131-18-0	(DPP) Di-n-pentyl phthalate *				**X**
84777-06-0	N-pentyl-isopentylphthalate				**X**
776297-69-9	(iPnPP) N-pentyl-isopentyl-phthalate				**X**
68515-50-4	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and				
68515-51-5	1,2-Benzenedicarboxylic acid, di-C6-10-alkyl ester with ≥				
68648-93-1	1,2-Benzenedicarboxylic acid, mixed decyl and hexyl and				
71850-09-4	Diisohexyl phthalate				
Various	**All other esters of ortho-phthalic acid**				

* From 2020 these Phthalates (DPP, DnHP, DMEP, DIPP, DIHP) will have a restriction of 1000 mg/kg according to REACH Annex XVII, entry 72

PVC				POLYMER
Restricted Substance		**Tiger of Sweden Limit**	**Test method & Reporting limit**	**Regulation & Country**
CAS No.	Substance	Usage Ban Negative < detection limit	Beilstein test for screening. If positive, confirmation by FTIR.	
9002-86-2	Polyvinyl chloride			

Chlorinated Organic Carriers (COC)				PROCESS CHEMICALS
Restricted Substance		**Tiger of Sweden Limit**	**Test method & Reporting limit**	**Regulation & Country**
Chlorinated Benzenes				
CAS No.	Substance	Usage Ban Trace: 1 mg/kg	DIN 54232 Solvent Extraction / GC-MS Reporting limit: 0.1 mg/kg	Cas No. 106-46-7 1,4-dichlorbenzen is in REACH, Annex XVII, entry 64 Pentachlorobenzene, Hexachlorobenzene are listed in POPs* and banned by Regulation (EC) No 850/2004**.
108-90-7	Monochlorobenzene			
Various	Dichlorobenzenes, all isomers			
Various	Trichlorobenzenes, all isomers			
Various	Tetrachlorobenzenes, all isomers			
608-93-5	Pentachlorobenzene			
118-74-1	Hexachlorobenzene			
Chlorinated Toluenes				
CAS No.	Substance	Usage Ban Trace: 1 mg/kg	DIN 54232 Solvent Extraction / GC-MS Reporting limit: 0.1 mg/kg	From 2020, α, α,α,4-tetrachlorotoluene (Cas 5216-25-1), α, α,α-trichlorotoluene (Cas 98-07-7), α-chlorotoluene (Cas 100-44-7) will have a restriction limit of 1 mg/kg in textiles according to REACH, Annex XVII, entry 72
Various	Monochlorotoluenes			
Various	Dichlorotoluenes			
Various	Trichlorotoluenes			
Various	Tetrachlorotoluenes			
877-11-2	Pentachlorotoluene			
*POPs is the Stockholm Convention on Persistent Organic Pollutants **Regulation (EC) No 850/2004 (EU regulation implementing Stockholm Convention).				

Siloxanes					PROPERTY LENDING CHEMICALS
Restricted Substance		**Tiger of Sweden Limit**	**Test method & Reporting**	**Regulation & Country**	**SVHC**
CAS No.	Substance				
556-67-2	Octamethylcyclotetrasiloxane (D4)	1000	Test equipment: GC-MS. LOQ: 100 mg/kg		**X**
541-02-6	Decamethylcyclopentasiloxane (D5)	1000			**X**
540-97-6	Dodecamethylcyclohexasiloxane (D6)	1000			**X**

Tin organic compounds (Organostannic compounds)				CATALYST, STABILIZERS AND BIOCIDAL AGENTS
Restricted Substance		**Tiger of Sweden Limit**	**Test method & Detection limit**	**Regulation & Country**
CAS No.	Substance	0,2 mg /kg per substance*	EN ISO 22744-1, -2 (textiles) ISO/TS 16179 Ethanol extraction, derivatization and analysis by GC-MS or LC-MS. Reporting limit: 0.02 mg/kg	Legal Limit: 0.1% by weight Dioctyltin (DOT), dibutyltin (DBT) compounds and tri-substituted organostannic compounds such as tributyltin (TBT) shall not be used in articles. Annex XVII of the Regulation (EC) No 1907/2006 (REACH), entry 20. Tributyltin oxide (TBTO), 56-35-9, Dibutyltin dichloride (DBTC), 683-18-1, 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-distannatetradecanoate (DOTE), 15571-58-1 and reaction mass of DOTE and MOTE 2 Dibutylbis(pentane-2,4-dionato-O,O')tin, 22673-19-4 and Dioctyltin dilaurate and related substances3, e.g. 3648-18-8 are listed on the Candidate List of Substances of Very High Concern for authorization of the Regulation (EC) No 1907/2006 (REACH).
Various	Dibutyltin and related compounds			
Various	Tributyltin and related compounds			
Various	Dioctyltin and related compounds			

Volatile Organic Compounds (VOC's)				PROCESS CHEMICALS	
Restricted Substance		**Tiger of Sweden Limit (mg/kg)**	**Test method & Reporting limit**	**Regulation & Country**	**SVHC**
Non-Chlorinated Aromatic Hydrocarbons					
CAS No.	Substance	200	Validated method, extraction or headspace GC/MS identification		
91-20-3	Naphthalene				
Non-halogenated Aliphatic Solvents					
CAS No.	Substance				
75-15-0	Carbon disulphide	500	Validated method, extraction or headspace GC/MS identification. DMFa: EN 17131 (textile) EN 16178 (footwear and footwear components)		
110-80-5	2-Ethoxyethanol	80			**X**
111-15-9	2-Ethoxyethanol acetate	80			**X**
109-86-4	2-Methoxyethanol	80			**X**
110-49-6	2-Methoxyethanolacetate	300			**X**
1589-47-5	2-Methoxypropanol	1000			
70657-70-4	2-Methoxypropanol acetate	1000			
122-99-6	2-Phenoxyethanol	400			
111-76-2	2-Butoxyethanol	1000			
75-12-7	Formamide	500			**X**
	Follow on the page				
127-19-5	(N,N-DMAC) N,N-dimethylacetamide	10		DMFa have a restriction limit of 3000 mg/kg in clothing, related accessories, textiles other than clothing in skin contact, or footwear (CMR fast track) according to Annex XVII of Regulation (EC) No 1907/2006 (REACH), entry 72.	**X**
68-12-2	(N,N-DMF) N,N-Dimethylformamide (DMFa)				**X**
872-50-4	(NMP) N-Methylpyrrolidone				**X**
Non-halogenated Aromatic Solvents					
CAS No.	Substance				

71-43-2	Benzene	Usage Ban Trace: 5	Validated method, extraction or headspace GC/MS identification.	In REACH Annex XVII, entry 5 From 2020, Benzene (CAS-RN 71-43-2) will have a restriction limit of 5 mg/kg in textiles (CMR fast track) according to REACH, Annex XVII, entry 72	
100-41-4	Ethylbenzene	100			
108-88-3	Toluene	1000		In REACH Annex XVII, entry 48	

Volatile Organic Compounds (VOC's) – continuing				**PROCESS CHEMICALS**	
Restricted Substance		**Tiger of Sweden Limit (mg/kg)**	**Test method & Reporting limit**	**Regulation & Country**	**SVHC**
Halogenated Aliphatic Solvents					
CAS No.	Substance		Validated method, extraction or headspace GC/MS identification.		
127-18-4	(PERC) Tetrachloroethylene	50			
79-01-6	(TCE) Trichloroethylene	50			**X**
96-18-4	1,2,3-trichloropropane	50			**X**
76-01-7	Pentachloroethane	100			
56-23-5	(Carbon Tetrachloride) Tetrachloromethane	10			
630-20-6	1,1,1,2-Tetrachloroethane	10			
79-34-5	1,1,2,2-Tetrachloroethane	100			
67-66-3	(Chloroform) Trichloromethane	100			
79-00-5	1,1,2-Trichloroethane	100			
75-35-4	1,1-Dichloroethylene	100			
71-55-6	1,1,1-Trichloroethane	100			
75-09-2	Methylene chloride	100			

Quinoline				PROCESS CHEMICALS	
Restricted Substance		**Tiger of Sweden Limit (mg/kg)**	**Test method & Reporting limit**	**Regulation & Country**	**SVHC**
CAS No.	Substance	50	Validated method, extraction or headspace GC/MS identification.	From 2020, Quinoline will have a restriction limit of 50 mg/kg in textiles according to REACH, Annex XVII, entry 72	
91-22-5	Quinoline				

UV STABILISERS				PROPERTY LENDING CHEMICAL	
Restricted Substance		**Tiger of Sweden Limit (mg/kg)**	**Test method & Reporting limit**	**Regulation & Country**	**SVHC**
CAS No.	Substance	≤ 1000mg/kg	ISO 24040:2022 (benzotriazoles) GC_MS, LC_MS, GC-ECD LOQ: 50 mg/kg (benzotriazoles) LOQ: 100 mg/kg (3-BC and DBMC)	UV-320, UV-327, UV-328, UV-350 , 3-BC and DBMC are at the Candidate List of Substances of Very High Concern for authorization of the Regulation (EC) No 1907/2006 (REACH).	
3846-71-7	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)				**X**
3864-99-1	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)				**X**
25973-55-1	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)				**X**
36437-37-3	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)				**X**
15087-24-8	3-benzylidene camphor (1,7,7-trimethyl-3-(phenylmethylene)bicyclo[2.2.1] heptan-2-one)(3-BC)				**X**
119-47-1	6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol (DBMC);				**X**

1.4.8 MISCELLANEOUS

pH				MISCELLANEOUS
Restricted Substance		**Tiger of Sweden Limit**	**Test method & Reporting limit**	**Regulation & Country**
CAS No.	Substance	Textiles: 4.0 – 8.5 Leather: 3.5 – 6.0	Textiles: ISO 3071 Leather: ISO 4045 pH meter accuracy: 0.2 pH units	
	pH*			
*A pH higher than 10 or lower than 3 can cause skin irritation. The pH value can easily be corrected by washing the article.				

1.4.9 BIOCIDAL AGENTS

Trisubstituted tin organic compounds				BIOCIDAL AGENTS
Restricted Substance		**Tiger of Sweden Limit**	**Test method & Detection limit**	**Regulation & Country**
CAS No.	Substance	2 mg /kg per substance*	EN ISO 22744-1, -2 (textiles) ISO/TS 16179 Ethanol extraction, derivatization and analysis by GC-MS or LC-MS. Reporting limit: 0.02 mg/kg	All tri-substituted organostannic compounds such as tributyltin (TBT) are restricted in articles in annex XVII of the Regulation (EC) No 1907/2006 (REACH), entry 20. The six TBT compounds listed to the left are also included in the Rotterdam convention. Tributyltin oxide (TBTO) 56-35-9 and Dibutyltin dichloride (DBTC), 683-18-1 are listed on the Candidate List of Substances of Very High Concern for authorization of the Regulation (EC) No 1907/2006 of the European Parliament and of the Council (REACH).
1461-22-9	Tributyltin chloride			
1983-10-4	Tributyltin fluoride:			
2155-70-6	Tributyltin methacrylate			
4342-36-3	Tributyltin benzoate			
24124-25-2	Tributyltin linoleate			
85409-17-2	Tributyltin naphthenate			

*Including but not limited to: (DBT) Dibutyltin, (TBT)** Tributyltin, (TBTO) Tributyltin oxide, (DMT) Dimethyltin, (TMT) Trimethyltin, (TPhT)** Triphenyltin, (DOT) Dioctyltin.
** Oeko-Tex & Japan have a limit of 1ppm for TBT & TPhT

Phenols (Chlorinated Phenols)				**BIOCIDAL AGENTS**
Restricted Substance		**Tiger of Sweden Limit**	**Test method & Detection limit**	**Regulation & Country**
CAS No.	Substance	Usage Ban Trace: 0.5 mg/kg	Textile: § 64 LFGB 82.02.8 GC/MS Identification Reporting limit: 0.1 mg/kg Leather: ISO 17070 Reporting limit: 0.1mg/kg Wood: CEN/TR 14823	PCP is listed in Annex XVII, entry 22, REACH. PCP is banned in Norway and Germany in textiles and leather. Legal limit: 5 mg/kg PCP is listed in the Rotterdam convention.
87-86-5	(PCP) Pentachlorophenol, its salts and compounds			
25167-83-3 4901-51-3 58-90-2 935-95-5	(TeCP) Tetrachlorophenol, its salts and compounds 2,3,4,5 TetraCP 2,3,4,6 TetraCP 2,3,5,6 TetraCP			
88-06-2 933-75-5 933-78-8 95-95-4 15950-66-0 609-19-8	(TriCP) Trichlorophenols 2,4,6 TriCP 2,3,6 TriCP 2,3,5 TriCP 2,4,5 TriCP 2,3,4 TriCP 3,4,5 TriCP	Adult: Sum 2,0 mg/kg		
90-43-7	(OPP) o-Phenylphenol	Textile/Synthetic leather: 100 mg/kg Leather: 750 mg/kg	Solvent extraction / GC-MS, LC-MS for confirmation. Leather: ISO 13365	Biocide directive 98/8/EC: Under revision for PT9 (textile, leather & polymer)

Other Biocides				BIOCIDAL AGENTS
Restricted Substance		**Tiger of Sweden Limit**	**Test method & Reporting limit**	**Regulation & Country**
Dimethyl Fumarate (DMFU)				
CAS No.	Substance	Usage Ban	CEN ISO/TS 16186 Reporting limit: 0.1 mg/kg	Legal limit: 0.1 mg/kg In REACH, Annex XVII, entry 61.
624-49-7	Dimethyl Fumarate (DMFu)			
Permethrin				
CAS No.	Substance	Not Detected Trace: 0.1 mg/kg	No standardised test method available for textile. EN ISO 22517 (pesticide residues in leather) Test equipment: GC-MS, LC-MS. LOQ: 5 mg/kg	On the list of temporarily permitted existing biocides within PT9 (product type 9) that includes textiles, polymers and leather, according to the Biocidal Products Directive (98/8/EC).
52645-53-1	Permethrin			
Sensitizing Isothiazolinones				
CAS No.	Substance	50 mg/kg 250 mg/kg	Solvent extraction / GC-MS, LC-MS for confirmation. Leather: ISO 13365	
26172-55-4	5-Chloro-2-Methyl-4-Isothiazolin-3-One			
2682-20-4	2-Methyl-4-Isothiazolin-3-one			
26530-20-1	2-n-Octyl-4-isothiazolin-3-one (OIT)			
Silver complexes in Nano size (Ag +)				
CAS No.	Substance	Usage Ban	ICP-MS, ICP-OES or AAS. Reporting limit: Total silver: 0.1 mg/kg.	Metallic silver is on the list of temporarily permitted existing biocides within PT9 (product type 9) that includes textiles, polymers and leather, according to the Biocidal Products Directive (98/8/EC).
Not Defined	(Ag +) Silver and It's compounds in Nano size			
Triclosan				
CAS No.	Substance	Usage Ban	EN 17134 (textile) GC-MS, LC-MS (other materials) Reporting limit: 1,0 mg/kg	On the list of temporarily permitted existing biocides within PT9 (product type 9) that includes textiles, polymers and leather, according to the Biocidal Products Directive (98/8/EC).
3380-34-5	Triclosan			
101-20-2	Triclocarban			

Other Biocides - continued				BIOCIDAL AGENTS
Restricted Substance		**Tiger of Sweden Limit**	**Test method & Reporting limit**	**Regulation & Country**
Cu-HDO				
CAS No.	Substance	Usage Ban	ICP-AES	Cu-HDO is banned within PT9 (product type 9) that includes textiles, polymers and leather, according to the Biocidal Product Regulation (EU 528/2012)
312600-89-8	Cu-HDO (Bis-(N-cyclohexyldiazeniumdioxy)-copper)			
Polyhexamethylene biguanide (PHMB)				
CAS No.	Substance	Usage ban	GC-MS, LC-MS.	PHMB is banned within PT9 (product type 9) that includes textiles, polymers and leather, according to the Biocidal Products regulation (EU 528/2012)
27083-27-8 32289-58-2	Polyhexamethylene biguanide (PHMB)			

1.4.10 RESTRICTIONS ON PACKAGING

Restrictions on Packaging*					
Restricted Substance		**Tiger of Sweden Limit**	**Test method & Reporting limit**	**Regulation & Country**	**SVHC**
CAS No.	Substance	Usage Ban for all 4 metals Trace of Cd & Pb: 100 mg/kg Trace of Cr^{+6}: 3 mg/kg Trace of Hg: 0.2 mg/kg Total Trace of all 4 metals: 100 mg/kg	CEN/CR 13695-1	Total sum of Cd, Pb, Cr^{+6} and Hg shall not exceed 100 ppm by weight, Directive (EC) No 94/62/EC of 20 December 1994 on packaging and packaging waste.	
7440-43-9	(Cd) Cadmium				**X**
7439-92-1	(Pb) Lead				
18540-29-9	(Cr^{+6}) Chromium hexavalent				
7439-97-6	(Hg) Mercury				
7646-79-9	Cobalt dichloride	Should not be present in Silica bags**. Trace: 0.1%	Test equipment: AAS or ICP-OES	In REACH Annex XVII, entry 28 & 30	**X**
624-49-7	(DMFu) Dimethylfumarate	Usage Ban Trace: 0.1 mg/kg	ISO/TS 16186 (footwear) SS-EN 17130 (textile and textile material)	In REACH Annex XVII, entry 61	
9002-86-2	PVC	Usage Ban Negative < detection limit	Beilstein test for screening. If positive, confirmation by FTIR.		
119-47-1	(DBMC) 6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol	Usage ban	No standardised test method available. Test equipment LC and GC-MS. LOQ: 100 mg/kg		**X**

*Packaging means transportation packaging as well as product packaging, i.e., any material used for the function packaging purpose such as containment, protection, handling, delivery, and presentation of finished products. For metals, concentration is calculated at element level.
**Commonly used for detection of moisture, for example in drying agents such as silica gel. When cobalt dichloride is added as an indicator, the drying agent is blue when still active and pink when exhausted.

Restrictions on Packaging continuing…					
Boric acid, borate compounds*				**PROPERTY LENDING CHEMICALS**	
Restricted Substance		**Tiger of Sweden Limit**	**Test method & Reporting limit**	**Regulation & Country**	**SVHC**
CAS No.	Substance	Usage ban	1) AAS 2) ICP-MS and ICP-OES Reporting limit: 1) 1000 µg/kg as Boron 2) 100 µg/kg as Boron	Legal limit: 1000 mg/kg or 0.1% by weight	
10043-35-3 11113-50-1	Boric acid				**X**
1303-96-4 1330-43-4 12179-04-3	Disodium tetraborate anhydrous				**X**
12267-73-1	Tetraboron disodium heptaoxide hydrate				**X**
234-390-0	Sodium perborate; perboric acid, sodium salt				**X**
7632-04-04	Sodium peroxometaborate				**X**
12008-41-2	Disodium octaborate,				**X**
13840-56-7	Orthoboric acid, sodium salt, e.g.				**X**
13701-59-2	Barium diboron tetraoxide,				**X**
*Commonly found in Wood material in packaging.					

1.4.11 SUBSTANCES WHICH ARE NOT COMMONLY FOUND IN TIGER OF SWEDEN PRODUCTS

Asbestos			
Restricted Substance		**Tiger of Sweden Limit**	**Regulation & Country**
CAS No.	Substance	Usage Ban Limit: Not Detected	Listed in Annex XVII, entry 6 Switzerland: ORRChem annex 1.6 (art. 3) USA: 16 CFR 1500.17 entry 7 Unlikely in everyday wear except for firefighting Personal Protection equipment (PPE)
77536-66-4	Actinolite		
12172-73-5	Amosite		
77536-67-5	Anthophyllite		
12001-29-5	Chrysotile		
12001-28-4	Crocidolite		
77536-68-6	Tremolite		

Dioxins & Furans		
Restricted Substance		**Tiger of Sweden Limit**
Group 1:		
CAS No.	Substance	Unavoidable traces: Sum of Group 1: 1 µg/kg
1746-01-6	2,3,7,8-Tetrachlorodibenzo-p-dioxin	
40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	
51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	
57117-31-4	2,3,4,7,8-Pentachlorodibenzofuran	
Group 2:		
39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	Unavoidable traces: Sum of Group 1 & 2: 5 µg/kg
19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	
57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	
57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	
70648-26-9	1,2,3,4,7,8Hexachlorodibenzofuran	
72918-21-9	1,2,3,7,8,9-Hexachlorodibenzofuran	
57117-44-9	1,2,3,6,7,8-Hexachlorodibenzofuran	
60851-34-5	2,3,4,6,7,8-Hexachlorodibenzofuran	
Group 3:		
35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	Unavoidable traces: Sum of Group 1, 2 & 3: 100 µg/kg
3268-87-9	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin	
67562-39-4	1,2,3,4,6,7,8-Heptachlorodibenzofuran	

55673-89-7	1,2,3,4,7,8,9-Heptachlorodibenzofuran	
39001-02-0	1,2,3,4,6,7,8,9-Octachlorodibenzofuran	
Group 4:		
50585-41-6	2,3,7,8-Tetrabromodibenzo-p-dioxin	Unavoidable traces: Sum of Group 4: 1 µg/kg
109333-34-8	1,2,3,7,8-Pentabromodibenzo-p-dioxin	
67933-57-7	2,3,7,8-Tetrabromodibenzofuran	
131166-92-2	2,3,4,7,8-Pentabromdibenzofuran	
Group 5:		
110999-44-5	1,2,3,4,7,8-Hexabromodibenzo-p-dioxin	Unavoidable traces: Sum of Group 4 & 5: 5 µg/kg
110999-46-7	1,2,3,7,8,9-Hexabromodibenzo-p-dioxin	
110999-45-6	1,2,3,6,7,8-Hexabromodibenzo-p-dioxin	
107555-93-1	1,2,3,7,8-Pentabromodibenzofuran	

Fluorinated Greenhouse Gases		
Restricted Substance		**Tiger of Sweden Limit**
CAS No.	Substance	Usage Ban
2551-62-4	Sulphur hexafluoride - SF_6	
Hydrofluorocarbons (HFCs):		
75-46-7	HFC-23 - CHF_3	Usage Ban
75-10-5	HFC-32 - CH_2F_2	
593-53-3	HFC-41 - CH_3F	
138495-42-8	HFC-43-10mee - $C_5H_2F_{10}$	
354-33-6	HFC-125 - C_2HF_5	
359-35-3	HFC-134 - $C_2H_2F_4$	
811-97-2	HFC-134a - CH_2FCF_3	
75-37-6	HFC-152a - $C_2H_4F_2$	
420-46-2	HFC-143 - $C_2H_3F_3$	
470-46-6	HFC-143a - $C_2H_3F_3$	
431-89-0	HFC-227ea - C_3HF_7	
	HFC-236cb - $CH_2FCF_2CF_3$	
431-63-0	HFC-236ea - CHF_2CHFCF_3	
690-39-1	HFC-236fa - $C_3H_2F_6$	
679-86-7	HFC-245ca - $C_3H_3F_5$	

460-73-1	HFC-245fa - $CHF_2CH_2CF_3$	
406-58-6	HFC-365mfc - $CF_3CH_2CF_2CH_3$	
Perfluorocarbons (PFCs):		
75-73-0	Perfluoromethane - CF_4	Usage Ban
76-16-4	Perfluoroethane - C_2F_6	
76-19-7	Perfluoropropane - C_3F_8	
355-25-9	Perfluorobutane - C_4F_{10}	
67-8-26-2	Perfluoropentane - C_5F_{12}	
355-42-0	Perfluorohaxane - C_6F_{14}	
115-25-3	Perfluorocyclobutane - c-C_4F_8	

Ozone Depleting Substances - Class I and II		
Restricted Substance		**Tiger of Sweden Limit**
Ozone Depleting Substances Class I		
75-69-4	Trichlorofluoromethane CFC-11	Usage Ban
75-71-8	Dichlorofluoromethane CFC-12	
354-58-5	1,1,1-trichlorotrifluoroethane CFC-113	
76-13-1	1,1,2-trifluoroethane CFC-113	
76-14-2	Dichlorotetrafluoroethane CFC-114	
76-15-3	Monochloropentafluoroethane CFC-15	
353-59-3	Bromochlorodifluoroethane Halon-1211	
75-63-8	Bromotrifluoromethane Halon-1301	
124-73-2	Dibromotetrafluoroethane Halon-2402	
75-72-9	Chlorotrifluoromethane CFC-13	
354-56-3	Pentachlorofluoroethane CFC-111	
76-12-0	Tetrachlorodifluoroethane CFC-112	
422-78-6	Heptachlorofluoropropane CFC-211	
3182-26-1	Hexachlorodifluoropropane CFC-212	
2354 06 5	Pentachlorotrifluoropropane CFC-213	
29255-31-0	Tetrachlorotetrafluoropropane CFC-214	
1599-41-3	Trichloropentafluoropropane CFC-215	

661-97-2	Dichlorohexafluoropropane CFC-216	
422-86-6	Monochloroheptafluoropropane CFC-217	
56-23-5	Carbon tetrachloride CC14	
71-55-6	1,1,1 trichloroethane (methyl Chloroform)	
	Halon-1211	
	Halon-1301	
	Halon-2402	

Ozone Depleting Substances Class II	
Trichlorotetrafluoropropane HCFC-4	Usage Ban
Dichlorofluoromethane-HCFC-21	
Monochlorodifluoromethane HCFC-22	
Monochlorofluoromethane HCFC-31	
Tetrachlorofluoroethane HCFC-121	
Trichlorodifluoroethane-HCFC-122	
Dichlorotrifluoroethane HCFC-123	
Monochlorotetrafluoroethane HCFC-124	
Trichlorofluoroethane-HCFC-131	
Dichlorodifluoroethane HCFC-132B	
Monochlorotrifluoroethane HCFC-133A	
Dichlorofluoroethane HCFC -141B	
Monochlorodifluoroethane HCFC-142B	
Hexachlorofluoropropane HCFC-221	
Pentachlorodifluoropropane HCFC-222	
Tetrachlorotrifluoropropane HCFC-223	
Tirchlorotetrafluoropropane HCFC-224	
Dichloropentafluoropropane HCFC-225CA	
Dichloropentafluoropropane HCFC-225CB	
Monochlorohexafluoropropane HCFC-226	
Pentachlorofluoropropane HCFC-231	
Tetrachlorodifluoropropane HCFC-232	

Trichlorotrifluoropropane HCFC-233	
Dichlorotetrafluropropane HCFC-234	
Monchloropentafluoropropane HCFC-235	
Tetrachlorofluoropropane HCFC-241	
Trichlorodifluoropropane HCFC-242	
Dichlorotrifluoropropane HCFC-243	
Monochlorotetrafluoropropane HCFC-244	
Trichlorofluoropropane HCFC-251	
Dichlorofluoropropane HCFC-252	

Ozone Depleting Substances Class II - continued	
Monochlorodifluoropropane HCFC-253	Usage ban
Dichlorofluoropropane HCFC-261	
Monochlorodifluoropropane HCFC-262	
Monochlorofluoropropane HCFC-271	

Pesticides		
Restricted Substance		**Tiger of Sweden Limit**
CAS No.	Substance	Usage Ban Trace: 0.5 mg/kg
93-76-5	2,4,5-Trichlorophenoxyacetic acid (2,4,5-T)	
94-75-7	2,4-Dichlorophenoxyacetic acid (2,4-D)	
135410-20-7, 160430-64-8	Acetamiprid	
116-06-3	Aldicarb	
86-50-0	Azinophosmethyl	
2642-71-9	Azinophosethyl	
309-00-2	Aldrin	
4824-78-6	Bromophos-ethyl	
191906	Captafol	
63-25-2	Carbaryl	
57-74-9	Chlordane	
6164-98-3	Chlordimeform	
470-90-6	Chlorfenvinphos	
210880-92-5	Clothianidin	
56-72-4	Coumaphos	
68359-37-5	Cyfluthrin	
91465-08-6	Cyhalothrin	
52315-07-8	Cypermethrin	
78-48-8	1,2,4-Tributylphosphorotrithioate (DEF)	
52918-63-5	Deltamethrin	
53-19-0, 72-54-8	Mitotan, 1,1-Dichlor- 2-(2-chlorphenyl)- 2-(4-chlorphenyl)ethane (DDD)	
3424-82-6, 72-55-9	1-Chlor-4-[2,2-dichlor-1-(4-chlorphenyl)ethenyl]benzene (DDE)	
50-29-3, 789-02-6	1,1,1-Trichlor-2,2-bis-(4-chlorophenyl)ethane (DDT)	
333-41-5	Diazinon	
120-36-5	Dichlorprop	
141-66-2	Dicrotophos	
60-57-1	Dieldrin	
60-51-5	Dimethoat	
88-85-7 et al	Dinoseb, Salze und Acetat	

Pesticides - continued		
Restricted Substance		**Tiger of Sweden Limit**
CAS No.	Substance	Usage Ban Trace: 0.5 mg/kg
165252-70-0	Dinotefuran	
959-98-8	Endosulfan, α-	
33213-65-9	Endosulfan, β-	
72-20-8	Endrin	
66230-04-4	Esfenvalerat	
51630-58-1	Fenvalerat	
76-44-8	Heptachlor	
1024-57-3	Heptachlorepoxid	
118-74-1	Hexachlorbenzol	
319-84-6	Hexachlorcyclohexan, α-	
319-85-7	Hexachlorcyclohexan, β-	
319-86-8	Hexachlorcyclohexan, δ-	
105827-78-9, 138261-41-3	Imidacloprid	
465-73-6	Isodrin	
4234-79-1	Kelevan	
143-50-0	Kepon	
58-89-9	Lindan	
121-75-5	Malathion	
94-74-6	2-Methyl-4-chlorophenoxyacetic acid	
94-81-5	(2-Methyl-4-chlorophenoxy) butyric acid	
93-65-2	Mecoprop	
10265-92-6	Metamidophos	
72-43-5	Methoxychlor	
2385-85-5	Mirex	
6923-22-4	Monocrotophos	
150824-47-8	Nitenpyram	
56-38-2	Parathion	
298-00-0	Parathion-methyl	
72-56-0	Perthan	
7786-34-7	Phosdrin/Mevinphos	
31218-83-4	Propethamphos	
41198-08-7	Profenophos	

Pesticides - continued		
Restricted Substance		**Tiger of Sweden Limit**
CAS No.	Substance	Usage Ban Trace: 0.5 mg/kg
13593-03-8	Quinalphos	
8001-50-1	Stroban	
297-78-9	Telodrin	
111988-49-9	Thiacloprid	
153719-23-4	Thiamethoxam	
8001-35-2	Toxaphen (Camphechlor)	
1582-09-8	Trifluralin	

Polyhalogenated Aromatic Hydrocarbons		
Restricted Substance		**Tiger of Sweden Limit**
1336-36-3, 53469-21-9	(PCB) Halogenated Biphenyls, including Polychlorinated Biphenyls	Usage Ban
Various	Halogenated Diarylalkanes	
Various	Halogenated Naphthalenes	
No CAS #	(PCT) Halogenated Terphenols, including Polychlorinated terphenyl	
99688-47-8 81161-70-8 76253-60-6	Halogenated diphenyl methanes, including: Halogenated diphenyl methanes Monmethyl-dibtomom-diphenyl methane Monomethyl-tetrachloro-diphenyls methane	Usage Ban

1.4.12 PROPOSITION 65: OTHER CHEMICALS LISTED WITH RELEVANCE TO THE MATERIALS REFERRED TO IN THIS GUIDANCE DOCUMENT

Proposition 65					PROCESS CHEMICAL
Restricted Substance		Tiger of Sweden Limit	Test method & Reporting limit	Regulation & Country	SVHC
CAS No.	Substance				
62-53-3	Aniline	NSRL: 100 µg/day	EN ISO 14362-1, -3 (textile) EN ISO 17234-1, -2 (leather) (methods specified in REACH Annex XVII, Appendix 10) LOQ: 20 mg/kg (per each of the arylamine breakdown products).		X
1694-09-3	Benzyl violet 4B	NSRL: 30 µg/day	Test equipment LC-MS (possible referense to DIN 54231 Textile)		**X**
1333-86-4	Carbon black (airborne, unbound particles of respirable size)	No Safe Harbor Limit	A Pyrolisis Method might be more proper than testing PAH? Foudn a ASTM D297-21 method specified for rubber AfPS GS 2019-01 PAK? ISO/TS 16190 (footwear) EN 17132 (textile)? LOQ: 0.2 mg/kg		**X**
114 6459-94-5	C.I. Acid Red	No Safe Harbor Limit	EN ISO 14362-1, -3 (textile) EN ISO 17234-1, -2 (leather) (methods specified in REACH Annex XVII, Appendix 10) LOQ: 20 mg/kg (per each of the arylamine breakdown products).		**X**

2429-74-5	C.I. Direct Blue 15	No Safe Harbor Limit	EN ISO 14362-1, -3 (textile) EN ISO 17234-1, -2 (leather) (methods specified in REACH Annex XVII, Appendix 10) LOQ: 20 mg/kg (per each of the arylamine breakdown products).		**X**
10124-43-3	Cobalt sulfate	No Safe Harbor Limit	Extractable cobalt (ISO 16 16711-2 textile, 17072-1 leather), Total content of cobalt (ISO 16711-1, Textile ISO 17072-2 leather)		**X**
10124-43-4	Ethylene dichloride (1,2-Dichloroethane)	No Safe Harbor Limit	No standardised test method for all substances available. Test equipment: GC-MS, GC-ECD		**X**
75-21-9	Ethylene oxide	NSRL: 2 µg/day MADL: 20 µg/day	Solid-phase microextraction followed by gas chromatography-mass spectrometry method (SPME-GC-MS)?		**X**
90-94-8	Michler's ketone	NSRL: 0.8 µg/day	EN ISO 14362-1, -3 (textile) EN ISO 17234-1, -2 (leather) (methods specified in REACH Annex XVII, Appendix 10) LOQ: 20 mg/kg (per each of the arylamine breakdown products).		**X**
91-20-3	Naphthalene	NSRL: 5.8 µg/day	AfPS GS 2019-01 PAK ISO/TS 16190 (footwear) EN 17132 (textile) LOQ: 0.2 mg/kg		**X**

1120-71-4	1,3-Propane sultone	NSRL: 5.8 µg/day	Test equipment GC-MS		**X**
72-57-1	Trypan blue (commercial grade)	No Safe Harbor Limit	EN ISO 14362-1, -3 (textile) EN ISO 17234-1, -2 (leather) (methods specified in REACH Annex XVII, Appendix 10) LOQ: 20 mg/kg (per each of the arylamine breakdown products).		**X**
118-74-1	Hexachlorobenzene	NSRL: 0.4 µg/day	EN 17137 (textile) for chlorotoluenes and chlorobenzenes?		**X**

1309-64-4	Antimony oxide (Antimony trioxide)	No Safe Harbor Limit	Extractable antimony (ISO 16711-2 textile, 17072-1 leather) and/or total content of antimony (ISO 16711-1, Textile ISO 17072-2 leather)		**X**
75-09-2	Dichloromethane (Methylene chloride)	50 µg/day	No standardised test method for all substances available. Test equipment: GC-MS, GC-ECD		**X**
62-75-9	N-Nitrosodimethylamine	NSRL: 0.04 µg/day	EN 71-12 (TSD)No standardised test method available for textiles. Test equipment: LC-MS, GC-MS?		**X**

137-42-8	Metham sodium	No Safe Harbor Limit	Test equipment GC-MS?		**X**
132-27-4	o-Phenylphenate, sodium	NSRL: 200 µg/day	ISO 13365:2011. Leather DIN 50009:2021 (AFIRM)		**X**
90-43-7	o-Phenylphenol (OPP)	No Safe Harbor Limit	ISO 13365:2011. Leather DIN 50009:2021 (AFIRM)		**X**
88-06-2	2,4,6-Trichlorophenol	NSRL: 10 µg/day	DIN 50009:2021 (AFIRM); Reporting limit 5 ppm each		**X**
74-83-9	Methyl bromide, as a structural fumigant	MADL - Inhalation: 810 µg/day	VOC analysis GC-MS		**X**
13674-87-8	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	NSRL: 5.4 µg/day	All materials: EN ISO 17881-1:2016 (AFIRM): Reporting limit 5 ppm each		**X**
593-60-2	Vinyl bromide	No Safe Harbor Limit	EN ISO 17881-1:2016 (AFIRM): Reporting limit 5 ppm each		**X**

1.4.13 CANDIDATE LIST WITH SUBSTANCES OF VERY HIGH CONCERN

Link to the SVHC List

The list of ECHA Candidates, SVHC's, is continuously updated. This list is available on the ECHA homepage below:
Candidate List of substances of very high concern for Authorisation - ECHA (europa.eu)

Appendix 01

TIGER OF SWEDEN RSL CORRECTIVE ACTION PLAN (CAP)		
Product info	Style number:	Brand:
	Style name:	Season:
	Col code:	Purchase order number:
	Product:	Supplier name:
	Merchandiser's name and email:	Supplier contact's name and email:
Lab info	Testing lab:	Lab contact's name and email:
	Test report number:	
	Description of the failed components and found substance:	
CAP	Identification and mapping of the source in the process where the failure occur:	
	Provide an action plan for correcting the specific case:	
	Provide an action plan for supplier to prevent the same to repeat in future production:	
	Action taken to prevent the same to repeat:	Verification of action taken and implemented:
	List of relevant documentation to be attached:	
	Signature	Date:

Appendix 02

RISK ASSESSMENT OF NANO SIZED MATERIALS

Questionnaire for suppliers of products that may contain Nano sized materials.

INTRODUCTION
Please provide as detailed answers as possible using all of your available information for each endpoint section below. Please write your answers per endpoint on a separate document which you enclose.

If there is no information available, please indicate with (X) below.

If the endpoint is irrelevant, please indicate with (X) below and provide a written explanation in the "comments" column regarding why this particular endpoint is irrelevant.

ENDPOINTS FOR NANO SIZED MATERIALS:

Nanomaterial Information/ Identification	**No data available**	**Irrelevant**	**Comments**
Nanomaterial name			
CAS Number			
Structural formula/molecular structure			
Composition of Nano material (including degree of purity, known impurities or additives)			
Basic morphology			
Description of surface chemistry (e.g., coating, modification…)			
Major commercial uses			
Known catalytic activity			
Method of production (e.g., precipitation, gas phase…)			
Other relevant identification data			

Physical-Chemical Properties and Material Characterization	**No data available**	**Irrelevant**	**Comments**
Agglomeration/ aggregation			
Water solubility/ Dispersibility			
Crystalline phase			
Dustiness			
Crystallite size			
Representative Electron Microscopy (TEM) picture(s) (if available, please enclose).			
Particle size distribution – dry and in relevant media			
Specific surface area			
Zeta potential (surface charge)			
Surface chemistry (where appropriate)			
Photo catalytic activity			
Pour density			
Porosity			
Octanol-water partition coefficient, where relevant			
Redox potential			
Radical formation potential			
Other relevant Physical-Chemical Properties and Material Characterization information (please specify if available).			

Environmental Fate	**No data available**	**Irrelevant**	**Comments**
Dispersion stability in water			
Biotic degradability			
Ready biodegradability			
Inherent biodegradability			
Simulation testing on ultimate degradation in surface water			
Soil simulation testing			
Sediment simulation testing			
Sewage treatment simulation testing			
Identification of degradation product(s)			
Abiotic Degradability and Fate			
Adsorption- desorption			
Adsorption to soil or sediment			
Bioaccumulation potential			
Other relevant environmental fate information (please specify if available)			

Environmental Toxicology	**No data available**	**Irrelevant**	**Comments**
Effects on pelagic specie (short term/long term)			
Effects on sediment species (short term/long term)			
Effects on soil species (short term/long term)			

Effects on terrestrial species			
Effects on microorganisms			
Effects on activated sludge at WWTP			
Other relevant information (please specify if available)			

Mammalian Toxicology	**No data available**	**Irrelevant**	**Comments**
Pharmacokinetics/ Toxicokinetics (ADME)			
Acute toxicity			
Repeated dose toxicity			
Chronic toxicity			
Reproductive toxicity			
Developmental toxicity			
Genetic toxicity			
Experience with human exposure			
Other relevant test data (please specify if available)			

Material Safety	**No data available**	**Irrelevant**	**Comments**
Flammability			
Explosivity			
Incompatibility			

Source: *(OECD, Series on the Safety of Manufactured Nanomaterials No. 27, LIST OF MANUFACTURED NANOMATERIALS AND LIST OF ENDPOINTS FOR PHASE ONE OF THE SPONSORSHIP PROGRAMME FOR THE TESTING OF MANUFACTURED NANOMATERIALS: REVISION, 1st of December 2010)*

CONFORMITY STATEMENT

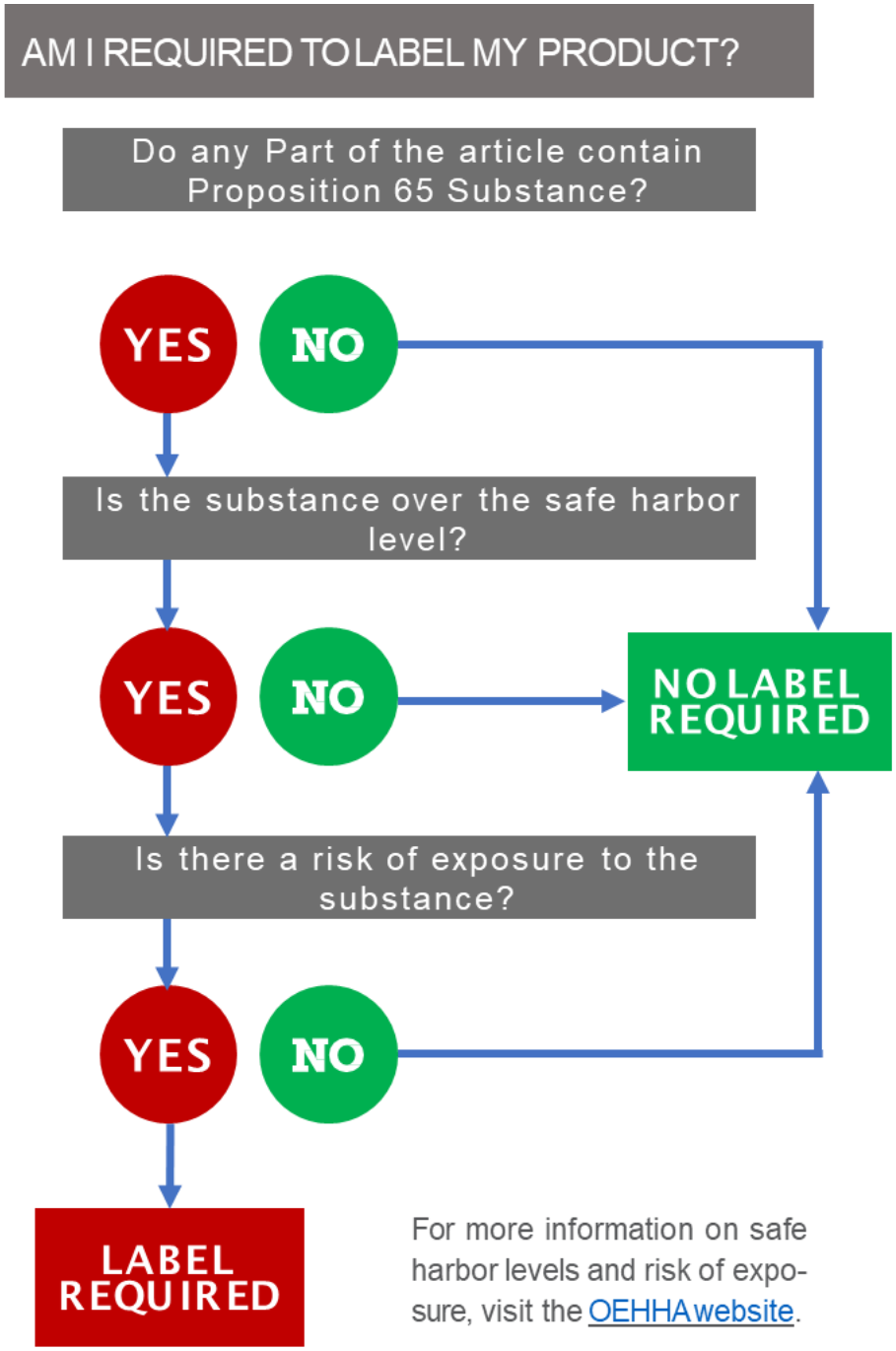
(Supplier) ……..…... hereby confirm that the information provided in this document is

consistent with the current state-of-the-art for (Product) ……..…….

Supplier Contact info (name, telephone no, mail) …….

....
Authorized signature Place and date

Appendix 03 – Proposition 65 risk assessment



Appendix 04 – Eurofins/Modern Testing Services Contact (Hong Kong) for Tiger of Sweden:

Eurofins MTS Consumer Product Testing Hong Kong Ltd.	**Name**	**Contact phone**	**Contact email**
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