Restricted Substances List

(Apparel, Accessory and Equipment)

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Contents

Introduction

Columbia Sportswear Company (CSC) and each of its subsidiaries and brands are committed to delivering safe, compliant, high-value products to our customers. We recognize this must be a shared effort and we depend on our partners throughout the supply chain to support our mission. This manual outlines your responsibilities as a licensee, vendor, or supplier (all referred to as suppliers from hereinafter) to CSC and its affiliated brands including Columbia Sportswear, Mountain Hardwear and Sorel.

Starting from F21, we have split our prior single Restricted Substance List (RSL) into two manuals:

- Apparel, Accessory and Equipment products : Fully adoption of the bluesign® RSL
- Footwear products: Adoption of the bluesign® RSL with a few modifications

This manual does not cover toys, personal protective equipment, mouth or food contact materials, furniture or the broad range of consumer hardgood products. Please reach out to Product Compliance for additional guidance on requirements for those product types.

CSC requires its suppliers to understand the standards set forth in this manual, to comply all the listed policies and restrict the use of substances listed in the RSL. Licensees are expected to comply with all requirements that apply to their product types. If a licensee would like technical guidance on requirements, they should reach out to Intertek whose regional contacts are located at the end of this manual.

CSC monitors compliance with these standards through RSL Testing Programs, Higg Facility Environmental Module (FEM), onsite factory audit and may remove a supplier from the approved list based on non-compliance. Additional requirements may be set forth in other CSC policies, manuals, and other documents and agreements, including our Chemical Management Policy and Supply Agreement. CSC expects suppliers to meet all CSC standards and ensure that all materials, finished goods, packaging and manufacturing practices are in compliance with all applicable laws, rules and regulations.

All the RSL manual content is not be changed without the approval of Product Compliance Team.

bluesign® System Partnership

CSC is committed to contributing to the development and adoption of leading industry standards. As part of our commitment, CSC joined bluesign technologies as a bluesign® system partner in 2016. The bluesign® system provides an independent, systematic solution for sustainable production and sets standards through an input stream management system and material production facility certification. Input stream management helps to implement responsible sourcing criteria and good purchasing practices which prevents unwanted substances from entering the manufacturing process. This approach helps reduce environmental, resource and human impacts and ensures consumer safety as unwanted substances are unable to be the finished materials.

CSC has aligned with the bluesign® Restricted Substance List and uses it as the basis for our Restricted Substances List. We believe that the bluesign® system offers emense value for textile manufactures and encourage our suppliers to explore facility level certification for their production facilities as well as inplement use of their positive chemistry list found within the bluesign® Finder tool.

To learn more about bluesign® visit http://www.bluesign.com

Supplier Responsibilities

- Suppliers bear responsibility for adhering to all applicable legal requirements regardless of whether they are referenced in this manual.
- The RSL is updated as needed and the most current version is always available on our website. Suppliers are responsible for complying with the most recent version of the RSL. Visit our website for more information.
- CSC may send periodic notices about relevant RSL updates and suppliers must take action as necessary or required
- Suppliers bear the responsibility to familiarize themselves with the RSL requirements set forth in this manual and all relevant global product safety requirements and ensure that all materials, components, and products supplied to CSC meet the requirements.
- Suppliers are responsible for informing their suppliers and subcontractors (including all accessory suppliers, dye mills, print mills, garment wash mills, tanneries, chemical suppliers, etc.) of CSC's requirements. Where the supplier controls the selection and sourcing of materials or components, they are responsible for ensuring compliance with the requirements of the RSL Manual.
- If at anytime the supplier becomes aware they cannot meet the requirements of the RSL, they must immediately notify an appropriate CSC contact.
- CSC reserves the right to cancel orders and/or terminate a business relationship if the supplier fails to meet these requirements. Compliance with the RSL is mandatory and must be met in its entirety for every order placed by CSC.
- Suppliers are responsible for maintaining adequate systems to control quality, safety and chemical use. Suppliers must maintain safety and environmental programs including documented procedures and training to protect workers and the environment from exposure to chemicals.
- If at any time any party has knowledge that a material or product fails, or will fail, to meet a standard as specified in the RSL Manual or any applicable requirement, production must be stopped, all suspect product must be placed on hold and appropriate CSC personnel must be immediately notified.
- No product or material containing suspected or actual defects that result in RSL or product safety violations may be sold or transferred to CSC or any other party.
- Suppliers will be held responsible for all losses and damages incurred by CSC for product or materials that fail to meet these requirements.
- Material, component and product testing may be required by CSC at any stage of manufacturing to demonstrate compliance with the requirements of this manual. Testing may be random or part of a scheduled testing program according to CSC requests. All testing must be done by a CSC-approved laboratory at the supplier's expense (see Testing Procedures section).
- Sampling, testing and reporting must be performed according to the RSL Testing Procedures in this manual. If test results fail to demonstrate compliance with the requirements of this manual or any legal requirement, production must be halted and may not continue until materials, components and products can be proven to meet the requirements. CSC personnel must be notified immediately of any nonconforming material, component or product.
- Suppliers are responsible for documenting all RSL and product safety failures, remediation efforts and proposed corrective action plans. All appropriate documentation must be submitted to CSC in accordance with our failure remediation processes.

- Suppliers are required to provide to CSC appropriate documentation, such as 3rd party test results, and certification documents, lot tracking and production information, or any information necessary to complete Certificates of Conformity (COC) or demonstrate compliance.
- Suppliers must maintain records of all compliance and production documents for a minimum of 5 years from the date of production. CSC reserves the right to review all records for any shipment at any time and will consider any shipment without associated compliance documents to be in violation of this policy.
- Suppliers shall allow or obtain permission for an authorized representative of CSC to inspect, at anytime during normal business hours, any premises of any facility, including any subcontractor facility where any CSC products or raw materials are developed, manufactured or stored. The authorized representative may take samples of products or materials during such inspections.
- Suppliers at all levels of the supply chain must provide Material Safety Data Sheet (MSDS) and chemical formulations upon request for each input used in, or in the manufacturing of, CSC products.
- Upon request, suppliers must disclose the functional use of each chemical and must distinguish process chemicals from those intended to remain in final product.
- Suppliers may be required to maintain a lot tracking system whereby lot numbers or specific identification of raw materials, components and parts can be traced through all stages of production to a finished good and a finished good can be traced back to records of substituent raw materials, components and parts.
- Suppliers responsible for production of finished goods are required to complete and furnish compliance documentation and Certificates of Conformity (COC) to CSC in accordance with our compliance procedures and process for all product prior to importation.

Chemical Management Policy

CSC Chemical management policy (CMP) aims to guide and support our suppliers in implementing an effective chemical management system, providing safer working conditions for workers, supporting product compliance, and improving environmental performance. Our policy is divided into 5 sections, **INPUT, FACILITY, OUTPUT, SYSTEM and COMMUNIATION**. Using What, Why and How approach, our policy guide suppliers on how to set up their own chemical management system. According to the policy, all suppliers must comply with the **4 Must Do Items**:

1. Commitment to comply with the CSC RSL
2. Assigning an individual responsible for chemical management
3. Establishment of a chemical purchasing process
4. Development and maintenance of a chemical inventory list

To learn more about Chemical Management Policy visit

https://cscworkday.blob.core.windows.net/hrforms/Recruiting/Career_Site/Standards_Policies_Manuals/CSC_CM_Policy_Guideline_English.pdf

We assess supplier performance and compliance with the CMP 4 Must Do Items through the Higg FEM. Suppliers are expected to complete the Higg FEM each year during the timeline established by CSC and the Sustainable Apparel Coalition.

Manufacturing Restricted Substances List (MRSL)

The purpose of the Manufacturing RSL (MRSL) is to limit the use of toxic chemicals that can be harmful to consumers, the environment and workers who may be exposed during manufacturing processes. The MRSL applies to chemicals used in finished product manufacturing processes in CSC contracted supplier facilities. Finished product suppliers must check all chemical inventories and each chemical purchase order to assure none of the listed chemicals are intentionally used in the manufacturing of products. Suppliers must ensure substitute chemical alternatives do not adversely impact product appearance or intended performance.

Restriction of Substances Used in Manufacturing				
CAS Number	**Chemical Name/Color Index Name**	**CSC Restriction/Limit on Chemical or Tested Component**	**Test Method [detection limit]**	**Chemical Description/Where Chemical May be Found/Comments**
50-00-0	Formaldehyde	May not be used	Reference to ISO 14184-1	Solvent, cleanser, wrinkle free resin
68-12-2	Dimethyl Formamide (DMF)		Solvent extraction, GC-MS analysis [5ppm]	Solvent , cleanser
75-09-2	Dichloromethane			Solvent, cleanser
108-95-2	Phenol			Solvent in primers, adhesives and resin for nylon and plastic
127-18-4	Tetrachloroethylene			Solvent, cleanser
108-88-3	Toluene			Solvent in primers, adhesives, paints and inks
1330-20-7	Xylene			Solvent in primers, adhesives, paints and inks
67-66-3	Trichloromethane			Solvent, cleanser
110-54-3	n-hexane			Solvent, cleanser
71-43-2	Benzene			Solvent in primers, adhesives, paints and inks

Biocide Policy

Biocides include chemicals used in or on an article to control and protect against harmful organisms like pests or bacteria, by the action of the active substances contained in the biocidal product. Examples of biocidal products include articles treated with insect repellents, disinfectants and antimicrobial chemicals meant to protect the product itself. No biocidal claims should be made about any product's ability to protect the consumer.

EU Biocidal Product Regulation (BPR)

According to EU Regulation No. 528/2012, biocidal products and their active substances must be authorized before use or placing on the EU market. All treated articles shall contain only authorized biocidal substances and authorized for use by specific product type. Biocides should not be used in CSC product unless requested and approved by CSC. Suppliers must inform CSC and submit information regarding any biocide chemical used in any product or treated article bearing a CSC brand. Any active biocidal substance used in CSC products must be in compliance with BPR.

Information on the EU Biocide Product Regulation may be found at https://echa.europa.eu/regulations/biocidal-products-regulation/understanding-bpr
Labeling Requirements for biocidal products

The label should contain below, and supplier must provide below information when relevant:

- a statement that the treated article incorporates biocidal products
- substantiation of biocidal property attributed to the treated article
- name of all active substances contained in the biocidal products
- name of all nanomaterials contained in the biocidal products
- any relevant instructions for use

Labels must be easily understandable and visible for consumers. All the local labelling requirement in each member state must be fulfilled, if any.

US Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)

All biocides, antimicrobials, and pesticides used in CSC materials and products must be registered for use with the Environmental Protection Agency (EPA). Depending on the specific substance used and the type of treated article it is used in or on, individual article registration may be required.
Information on the US Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) may be found at https://www.epa.gov/laws-regulations/summary-federal-insecticide-fungicide-and-rodenticide-act

Durable Water Repellant Chemical Policy

CSC has phased out Long Chain Perfluorinated Compounds (LCPFCs)* including PFOA and PFOS (<1µg/m^2), from all of our products. All suppliers must use Short Chain Perfluorinated Compounds (SCPFCs) as the durable water repellant (DWR) finishing for all materials and water proof breathable membranes, such as C6 or C4 DWR chemicals.

CSC Position Statement regarding effort to reduce and eliminate fluorochemicals (PFOS and PFOA):

https://www.columbia.com/on/demandware.static/-/Sites-Columbia_US-Library/default/dw2db4e409/AboutUs/PDF/COLM%20PFOA-PFOS%20Statement%20Draft%205-21-15.pdf

*Definition of Long Chain Perfluorinated Compounds :

- Perfluorocarbofxylic acids with carbon chain lengths C8 and higher, including perfluorooctanoic acid (PFOA);
- Perfluoroalkyl sulfonates with carbon chain lengths C6 and higher, including perfluorohexane sulfonic acid (PFHxS) and perfluorooctane sulfonate (PFOS); and
- Precursors of these substances that may be produced or present in products.

Flame Retardant Policy

Flame retardants are chemicals which are applied to materials or finished goods to decrease the ignitability of materials and inhibit the spread of fire. Certain flame retardants are found to pose serious risks to human health, wildlife and the environment. Please reach out Product Compliance team for approval if any flame retardants are used intentionally.

CSC Children's products:

CSC has restricted the use of flame retardants* in all children's products. Suppliers must not apply any flame retardant chemicals* to any children's product supplied to CSC.

Unless otherwise noted, Youth products include all infant, toddler, children, girls, boys and youth sizes, products primarily intended for children 14 years and younger, all Youth apparel products sizes Youth XL (18/20) and smaller as well as Youth footwear sizes 7 and smaller.

Product attributes such as size, child related themes, and features with play value, materials, as well as product packaging, promotional materials, display, advertising, appeal and where the product is sold must be evaluated in determining whether a product could be considered a Youth product. If you are unsure whether this guideline applies to a style or product please contact CSC Product Compliance.

Mountain Hardwear tents:

Mountain Hardwear (MHW) values ethical and sustainable manufacturing practices that are intended to minimize, mitigate or eliminate risks to workers, customers and the environment. Effective from Spring 2019 production forward, MHW has restricted the use of all additive chemical flame retardants* in their tents. Suppliers must not apply any flame retardant chemicals to any tents to MHW

*Flame retardant chemicals includes (but not limited to) the entire group of organic and inorganic halogenated and phosphorus compounds.

Polyvinylchloride Policy

CSC has eliminated the use of Polyvinylchloride (PVC, CAS 9002-86-2) from all products due to high risk of restricted substances such as lead, phthalates, and cadmium and discourages its use except in rare circumstances. If a supplier is asked to use PVC, production and testing processes must be reviewed by and approved by CSC Product Compliance prior to use to ensure the product compliance with the RSL.

Electrical and Electronic Equipment (EEE) Policy

The Columbia Sportswear Company Electrical and Electronic Equipment (EEE) policy applies to any product which is dependent on electric currents or electromagnetic fields in order to work properly and equipment designed for generation, transfer and measurement of such currents and fields with a voltage rating not exceeding 1000 Volt AC and 1500 Volt DC[1].

- Suppliers are responsible for identifying and adhering to all applicable global EEE compliance and product safety standards.
- If EEE is a component of a consumer product, all other parts of the product must meet the RSL requirements above.
- All EEE batteries used in CSC products must be easily removable by the user and comply with the EU battery directive.
- EEE batteries, accumulators and battery packs must be marked with the crossed-out wheeled bin symbol shown below and comply with Waste Electrical and Electronic Equipment (WEEE) EU Directive 2002/96/EC:

- Suppliers are responsible for all EEE product compliance testing and conformity assessments to satisfy all applicable regulatory requirements.
- Suppliers must retain all technical documents, declarations of conformity and documentation to demonstrate compliance for 10 years after the EEE is sold or transferred to CSC.
- CSC reserves the right to review all EEE records and will consider any product without associated compliance documents to be in violation of this policy.
- All EEE must comply with Directive 2011/65/EC (RoHS) and meet the chemical limits listed below.

[1] Directive 2011/65/EU of the European Parliament and of the Council on the Restriction of the use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS).
◦ Substances in Electrical & Electronic Equipment and Batteries, please refer to CSC RSL section.

Nanotechnology Policy

'Nanomaterial' means a natural, incidental or manufactured material containing very small particles, in an unbound state or as an aggregate or as an agglomerate and where, for 50% or more of the particles in the number size distribution, one or more external dimensions is in the size range 1 nm-100 nm.

Workers handling nanomaterials in manufacturing processes may be exposed to nanoparticles through inhalation, dermal contact, or ingestion.

CSC discourages the use of nanomaterials in CSC products except in rare circumstances. If a supplier is asked to use nanomaterial such as in UV blocking, flame retardants, or antimicrobial finishing, production processes must be reviewed by CSC Product Compliance. Also refer to CSC – Supplier's Environmental, Health and Safety Handbook for handling requirements.

Supplier must provide below information, when relevant:

1. Intended use, function and purpose of the nanomaterial and information regarding any material or end product in which it will be used;
2. Manufacturing methods;
3. Characteristics, physical and chemical properties of the nanomaterial such as:
    - composition
    - identity
    - purity
    - morphology
    - structural integrity
    - catalytic or photo-catalytic activity
    - particle size/size distribution
    - electrical/mechanical/optical properties
    - surface-to-volume ratio
    - chemical reactivity
    - surface area/chemistry/charge/structure/shape
    - water solubility/dispersibility
    - agglomeration/aggregation (or other properties), and
    - descriptions of the methods used to assign these determinations
4. Toxicological, eco-toxicological, metabolism and environmental fate data that may be both generic and specific to the nanomaterial if applicable.
5. Risk assessment and risk management strategies, if considered or implemented.

Packaging Restriction Policy

Suppliers of packaging and packaging components shall comply with the Coalition of Northeastern Governors (CONEG) Toxic in Packaging Legislation adopted by several US states, the EU Directive 94/62/EC on packaging and packaging waste, and the heavy metal requirements in the table below. Packaging is defined as any container providing a means of marketing, protection or handling of a product and shall include a unit package, an intermediate package and a shipping carton. Non-returnable items used for the same purposes shall also be considered to constitute packaging. It shall include unsealed receptacles such as carrying cases, crates, cups, pails, rigid foil and other trays, wrappers and wrapping films, bags and tubs.

Packaging component means any individual assembled part of a package such as, but not limited to, any interior or exterior blocking, bracing, cushioning, weatherproofing, exterior strapping, coatings, closures, inks and labels.

Heavy Metals in packaging material				
CAS Number	**Chemical Name/Color Index Name**	**CSC Restriction/Limit on Final Product or Tested Component**	**Test Method [detection limit]**	**Chemical Description/Where Chemical May be Found/Comments**
7439-92-1	Lead, Pb	Sum of Heavy Metals < 100 ppm	Acid digestion with ICP (Detection limit = 5 ppm each metal)	-
7440-43-9	Cadmium, Cd			
18540-29-9	Chromium VI, Cr (VI)			
7439-97-6	Mercury, Hg			

Regulatory Requirements

From time to time CSC may become aware of new regulatory requirements. As applicable, CSC will endeavor to inform suppliers annually or as needed of new requirements through periodic notice and/or manual update. However failure of CSC to inform suppliers of regulatory changes does not release suppliers from responsibility to monitor and fully comply with all relevant legal requirements.

Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)

REACH Regulation (EC) No 1907/2006 of the European Parliament and European Council is the European Community Regulation on chemicals and their safe use. REACH entered into force on June 1, 2007 and establishes requirements for the registration, evaluation, authorisation and restriction of chemical substances within the EU market. REACH Annex XVII which came into force on June 1, 2009 and restricts the manufacture placing on the market and use of certain dangerous substances, mixtures and articles adopted under REACH and prior legislation Directive 76/769/EEC (European Economic Community). A restriction can apply to any substance on its own, in a mixture or in an article.

Suppliers have legal obligations related to REACH regulations and the REACH Candidate List of Substances of Very High Concern (SVHC). Suppliers must continuously monitor updates to REACH, Annex XVII and Candidate List of Substances of Very High Concern (SVHC) and ensure materials and products supplied to CSC comply with all REACH requirements regardless of whether the substances are included within the RSL.
Suppliers must evaluate each step in the supply chain, including the sourcing and processing of raw materials, component parts, chemicals and other product ingredients and ensure the article contain < 0.1% of candidate list of SVHC. They must immediately inform CSC of any cases where a substance listed in the candidate list is present in the product at or in a concentration above 0.1% weight by weight. In the case of articles composed of multiple materials, the limit applies to each homogenous part or component of the article. CSC may require random testing for SVHC in materials and finished products to demonstrate compliance.

REACH information may be found at https://echa.europa.eu/regulations/reach/understanding-reach and https://echa.europa.eu/home
Candidate list substances (SVHC) can be found at http://echa.europa.eu/web/guest/candidate-list-table
Pre-candidate substances are found at https://echa.europa.eu/substances-of-very-high-concern-identification

US State Level Regulations and Requirements

Children's Product Reporting

Washington State Children Safe Product Act (CSPA)[2], Vermont Toxic Free Families Act[3], Maine Toxic Chemicals in Children's Products[4] and Oregon Toxic Free Kids Act[5]

Various US state level regulations may require importers to notify relevant authorities of the presence of Chemicals of High Concern to Children (CHCC) or Priority Chemicals (PC) in children's products. Suppliers must inform CSC product compliance if any of the listed CHCCs or PCs are intentionally added to any CSC product, or if a listed chemical is a contaminant in the process that exceeds 100 ppm in any component. In addition to chemical disclosure and reporting, various regulations may require documented exposure assessments, alternatives assessments, substitutions or removal of CHCC or PC.

A list of Chemicals of High Concern to Children or Priority Chemicals can be found at:

Washington: http://www.ecy.wa.gov/programs/hwtr/RTT/cspa/chcc.html
Vermont: https://www.healthvermont.gov/sites/default/files/documents/pdf/Env_CDP_chemicals_of_high_concern_to_children.pdf
Maine: https://www.maine.gov/dep/safechem/childrens-products/rules.html
Oregon: https://www.oregon.gov/oha/ph/HealthyEnvironments/HealthyNeighborhoods/ToxicSubstances/Pages/childrens-chemicals-of-concern.aspx

California Proposition 65

Proposition 65, the Safe Drinking Water and Toxic Enforcement Act of 1986, was intended by its authors to protect California citizens and the State's drinking water sources from chemicals known to cause cancer, birth defects or other reproductive harm, and to inform citizens about exposures to such chemicals. Businesses and Manufacturers must provide Proposition 65 warnings if any listed chemical's exposures greater than the safe harbor level. Suppliers must inform CSC Product Compliance if any of the listed chemicals are intentionally added to any CSC product, or if a listed chemical is contaminant in the process that exceed safe harbor level.

Proposition 65 list can be found at http://www.oehha.ca.gov/prop65/prop65_list/Newlist.html

[2] Washington State Children Safe Product Act, RCW 70.240 reporting rule
[3] Vermont Toxic Free Families Act, S239, Act 188, An Act relating to the regulation of toxic substances reporting rules
[4] Maine Toxic Chemicals in Children's Product, M.R.S.A. §1691-1695, A law relating to the regulation of toxic substances reporting rules
[5] Oregon Toxic Free Kids Act, Senate Bill 478 2015 session, An Act relating to the regulation of toxic substances reporting rules

Restricted Substances List (RSL)

The goal of the RSL is to protect workers, the environment, consumers, the company and its brands. The RSL is not intended to be a comprehensive list of all global restrictions but rather a compliance tool for our suppliers. The CSC RSL Manual reflects mandatory regulations and voluntary safety standards applicable to our products. In some cases CSC requirements may go beyond the legal requirements of any country, in these cases suppliers are expected to meet CSC requirements. The RSL applies to all products of all brands supplied to CSC including apparel, footwear, equipment, accessories and other products, with different requirements depending on the product types. The RSL also applies to all materials, components, parts and other goods supplied for use in manufacturing CSC products and packaging. Restricted substances must not exceed the limits stated in the Columbia Sportswear Company RSL.

The substances listed in the RSL are grouped by type or functionality and are referenced by the Chemical Abstract Service Number (CAS Number) and common chemical name or color index name. Corresponding restrictions, limits for use and required test methods, if available, are listed for each substance or chemical group. The most up to date test method should be used.

A brief description[6] of the substance (or chemical group) and an indication of where it may be found in materials or products is also provided . This information is provided as a general reference only and does not represent the actual risk a substance may be present. It is advisable to consult your own materials experts or outside expertise to learn more about these specific substances and their potential occurrence in the materials or products you supply.

The bluesign® RSL (Version 10.0) serves as the basis for the Columbia Sportswear Company (CSC) Restricted Substances List. Beginning with FA21, all production must comply with the strictest applicable limit[7] .

[6] Source: Apparel and Footwear International RSL Management Working Group (AFIRM), http://www.afirm-group.com/supplierrsltool.htm; Zero Discharge of Hazardous Chemicals (ZDHC), https://www.roadmaptozero.com/; United States Environmental Protection Agency (US EPA), https://www.epa.gov/

[7] Refer to the limit of Usage Range A - C

Definitions

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

CAS
CAS registry numbers are unique numerical identifiers for chemical elements, compounds, polymers, biological sequences, mixtures and alloys. Chemical Abstracts Service (CAS), a division of the American Chemical Society, assigns these identifiers to every chemical that has been described in the literature. The intention is to make database searches more convenient, as chemicals often have many names. Almost all molecule databases today allow searching by CAS number.

Chemical substance A chemical element and its compounds with constant composition and properties. It is defined by the CAS number.

Detection limit (DL) The detection limit is the lowest quantity of a substance that can be distinguished from the absence of that substance following a prescribed analytical method.

Limit value The maximum amount of chemical substances permitted in articles for the usage ranges A, B and C.

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

Usage ban For several chemical substances or substance groups a usage ban is defined. For these substances or substance groups intentional use in manufacturing of articles is prohibited. That means that chemical products (e.g. colorants or textile auxiliaries) used for manufacturing of articles must not intentionally contain these substances or substance groups.
The aim of an usage ban is to avoid releasing harmful substances to the environment and to avoid occurrence in the manufactured article by precautionary principle.

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

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

Scope

The document at hand specifies restrictions (limits and bans) for chemical substances in all material products of all brands supplied to CSC including apparel, equipment, accessories and other products. The CSC RSL also applies to all materials, components, parts and other goods supplied for use in manufacturing CSC products and packaging.

Application

The limits and restrictions have to be applied for each individual component of an intermediate or finished article. A component is each part of an article that can be distinguished according to the material composition and/or functionality and/or color and is easily mechanically separated from other components.

Testing methods

International or national standards are given for several substances and these methods may be applied. Other accredited methods can only be applied if it can be verified that equivalent results are obtained.

Restrictions and bans for parameters and chemical substances

For easier comprehension and overview the substances are subsumed in groups. The groups are degined according to the

- Chemical composition (e.g. amines, isocyanates)
- Functionality (e.g. flame retardants, solvents)
- EHS-properties / risks (e.g. greenhouse gases, ozone depleting substances)

Note: Some of the substances may be relevant for more than one group; in such cases the substance is grouped under the most likely group.

PARAMETER	LIMIT [MG/KG]			RECOMMENDED SAMPLE PREPARATION // TEST METHOD	POTENTIAL USAGE
	A	B	C		
pH	Non-leather products:			ISO 3071	-
	4.0-7.5				
	Leather products:			ISO 4045	
	3.5-7.5				

SUBSTANCE	LIMIT [MG/KG]			RECOMMENDED SAMPLE PREPARATION // TEST METHOD	POTENTIAL USAGE
	A	B	C		
Aldehydes					
Formaldehyde (CAS 50-00-0)	DL (15)	75	75	Textile: ISO 14184-1 Leather: ISO 17226-1 or ISO 17226-2	Used in textiles as an anti-creasing and anti-shrinking agent. It is also often used in polymeric resins.

SUBSTANCE	LIMIT [MG/KG]			RECOMMENDED SAMPLE PREPARATION // TEST METHOD	POTENTIAL USAGE
	A	B	C		
Alkylphenols (APs) and **Alkylphenolethoxylates (APEOs)** listed in Appendix A	**Usage ban** 10 for each Alkylphenol 100 for each Alkylphenolethoxylate			Textile: ISO 18254-1 Leather: ISO 18218-1	APEOs can be found in detergents, scouring agents, spinning oils, wetting agents, softeners, emulsifying/dispersing agents for dyes and prints, polyester padding and down/feather fillings. APs are used as intermediaries in the manufacture of APEOs and antioxidants used to protect or stabilize polymers. Biodegradation of APEOs into APs is the main source of APs in the environment.
Amines					
Aniline (free) (CAS 62-53-3)	**Usage ban** DL: 30			Extraction with MeOH // GC-MS or HPLC	Aniline is predominantly used as a chemical intermediate for the dye, polymer, and rubber industries. It is also used as a solvent.

SUBSTANCE	LIMIT [MG/KG]			RECOMMENDED SAMPLE PREPARATION // TEST METHOD	POTENTIAL USAGE
	A	B	C		
Arylamines and salts (including corresponding salts; as substance for example in PU, and as decomposition product of azo colorants which, by reductive cleavage of one or more azo groups, may release one or more of the aromatic amines) listed in Appendix B	**Usage ban** DL: 20			Textile: EN ISO 14362-1 EN ISO 14362-3 (for azo colorants which may release 4-Aminoazobenzene) Leather: EN ISO 17234-1 EN ISO 17234-2 (for azo colorants which may release 4-Aminoazobenzene)	Azo dyes and pigments are colorants that incorporate one or several azo groups (-N=N-) bound with aromatic compounds. Thousands of azo dyes exist, but only those which degrade to form the listed cleavable amines are restricted. Azo dyes that release these amines are regulated and should no longer be used for dyeing textiles.
Asbestos listed in Appendix C	**Usage ban not detected**			REM/EDX BGI 505-46 or U.S. EPA/600/R-93/116	Asbestos has been used in heat-resistant fabrics, packaging, gaskets, and coatings because of its fiber strength and heat resistance.
Chlorinated Benzenes and Toluenes listed in Appendix D	**Usage ban** DL: 1.0 Sum of all: 5.0			DIN 54232	Chlorobenzenes and Chlorotoluenes (Chlorinated Aromatic Hydrocarbons) can be used as carriers in the dyeing process of polyester or wool/ polyester fibers. They can also be used as solvents.

SUBSTANCE	LIMIT [MG/KG]			RECOMMENDED SAMPLE PREPARATION // TEST METHOD	POTENTIAL USAGE
	A	B	C		
Chlorinated Phenols listed in Appendix E	**Usage ban**			Extraction with KOH // § 64 LFGB B 82.02-8 or DIN EN ISO 17070	Chlorophenols are polychlorinated compounds used as preservatives or pesticides. Pentachlorophenol (PCP), Tetrachlorophenol (TeCP), and Trichlorophenols (TriCP) are sometimes used to prevent mold and kill insects when growing cotton and when storing/transporting fabrics. PCP, TeCP, and TriCP can also be used as in-can preservatives in print pastes and other chemical mixtures.
Monochlorophenols (MonoCP), all isomers (CAS 25167-80-0)	Sum of all Mono- and DiCPs:				
Dichlorophenols (DiCP), all isomers (CAS 25167-81-1)	1.0	1.0	1.0		
Trichlorophenols (TriCP), all isomers (CAS 25167-82-2)	Sum of each group of TriCPs, TeCPs, PCPs:				
Tetrachlorophenols (TeCP), salts and compounds (CAS 25167-83-3)	0.05	0.5	0.5		
Pentachlorophenol (PCP), salts, esters and compounds (CAS 87-86-5)					
Colorants	**Usage ban**			DIN 54231	Disperse dyes are a class of water-insoluble dyes that penetrate the fiber system of synthetic fibers (e.g., polyester, acetate, polyamide) and are held in place by physical forces without forming chemical bonds. Restricted disperse dyes are suspected of causing allergic reactions and are prohibited from use for dyeing of textiles.
Colorants with carcinogenic potential listed in Appendix F	DL: 20				
Colorants with allergenic potential listed in Appendix G	DL: 20				
Colorants banned for other reasons listed in Appendix H	DL: 20				

SUBSTANCE	LIMIT [MG/KG]			RECOMMENDED SAMPLE PREPARATION // TEST METHOD	POTENTIAL USAGE
	A	B	C		
Dioxins and Furans listed in Appendix I	**Usage ban**			EPA 8290A	Dioxins and furans are not made for any specific purpose; however, they are created when products like herbicides are made. In addition, they can be produced when products are burned.
Group 1	Sum of group 1: 1.0 [µg/kg]				
Group 2	Sum of group 1 and 2: 5.0 [µg/kg]				
Group 3	Sum of group 1, 2 and 3: 100 [µg/kg]				
Group 4	Sum of group 4: 1.0 [µg/kg]				
Group 5	Sum of group 4 and 5: 5.0 [µg/kg]				
Flame Retardants listed in Appendix J	**Usage ban** DL: 5.0			ISO17881-1 for brominated flame retardants ISO17881-2 for phosphorus flame retardants	Flame retardants are chemicals added to products to meet established flammability standards by decreasing the ability of materials to ignite.
	Chlorinated paraffins in leather: **Usage ban** 100				
Flame Retardants: Polybrominated diphenyl ethers (PBDE) Polybrominated biphenyls (PBB)	Electrical & Electronic Equipment: 1000			IEC 62321Annex A, GC-MS	

SUBSTANCE	LIMIT [MG/KG]			RECOMMENDED SAMPLE PREPARATION // TEST METHOD	POTENTIAL USAGE
	A	B	C		
Dioxins and Furans listed in Appendix I	**Usage ban**			EPA 8290A	Dioxins and furans are not made for any specific purpose; however, they are created when products like herbicides are made. In addition, they can be produced when products are burned.
Group 1	Sum of group 1: 1.0 [µg/kg]				
Group 2	Sum of group 1 and 2: 5.0 [µg/kg]				
Group 3	Sum of group 1, 2 and 3: 100 [µg/kg]				
Group 4	Sum of group 4: 1.0 [µg/kg]				
Group 5	Sum of group 4 and 5: 5.0 [µg/kg]				
Fluorinated Greenhouse Gases listed in Appendix K	**Usage ban** DL: 0.1			Headspace GC-MS	May be used as foam blowing agents, solvents, fire retardants, and aerosol propellants.

SUBSTANCE	LIMIT [MG/KG]			RECOMMENDED SAMPLE PREPARATION // TEST METHOD	POTENTIAL USAGE
	A	B	C		
Fluorinated Substances					PFOA and PFOS may be present as unintended byproducts in long-chain and short-chain commercial water-, oil-, and stain-repellent agents. PFOA may also be used in polymers like Polytetrafluoroethylene (PTFE).
Perfluorooctane sulfonic acid / Perfluorooctane sulfonate (PFOS)* (CAS 1763-23-1)	**Usage ban** 1.0 [µg/m^2]			CEN/TS 15968	
Perfluorocarboxylic acid and salts	**Usage ban**			CEN/TS 15968	
PFHxA (CAS 307-24-4)	0.05				
PFOA** (CAS 335-67-1)	**Usage ban** 1.0 [µg/m^2] & Traces: 25 [µg/kg]				
PFOA-related substances	**Several**				
Heptadecafluoro-1-iodooctane** (CAS 507-63-1)	**Usage ban** Traces: 1000 [µg/kg] (for the sum of PFOA-related substances)			CEN/TS 15968	
1H,1H,2H,2H-Perfluorodecyliodide** (CAS 2043-53-0)					
8:2 FTOH, Perfluorooctylethanol** (CAS 678-39-7)				Extraction with MTBE // GC-MS	
Perfluorooctylethene** (CAS 21652-58-4)				ASE with Ethyl acetate // GC-MS or LC-MS	
Perfluorooctylethyl acrylate or methacrylate**（Several）				Extraction with MTBE // GC-MS	
*Ban on long-chain compounds in manufacturing based on long-chain electrofluorination chemistry (C6 and higher). **Phase-out of long-chain compounds in manufacturing based on long-chain telomer chemistry (C8 and higher) until end of 2014.					

SUBSTANCE	LIMIT [MG/KG]			RECOMMENDED SAMPLE PREPARATION // TEST METHOD	POTENTIAL USAGE
	A	B	C		
Glycols					
Bis(2-methoxyethyl)-ether (CAS 111-96-6)	**Usage ban** DL: 5.0			Textile: Extraction with MeOH // GC-MS Plastic: 2-Step extraction with THF and MeOH // GC-MS	In apparel and footwear, glycols have a wide range of uses including as solvents for finishing/cleaning, printing agents, and dissolving and diluting fats, oils and adhesives (e.g., in degreasing or cleaning operations).
2-Ethoxyethanol (CAS 110-80-5)					
2-Ethoxyethyl acetate (CAS 111-15-9)					
Ethylene glycol dimethyl ether (CAS 110-71-4)					
2-Methoxyethanol (CAS 109-86-4)					
2-Methoxyethylacetate (CAS 110-49-6)					
2-Methoxy-1-propanol (CAS 1589-47-5)					
2-Methoxypropylacetate (CAS 70657-70-4)					
Triethylene glycol dimethyl ether (CAS 112-49-2)					

SUBSTANCE	LIMIT [MG/KG]			RECOMMENDED SAMPLE PREPARATION // TEST METHOD	POTENTIAL USAGE
	A	B	C		
Halogenated Biphenyls, halogenated Terphenyls, halogenated Naphthalenes listed in Appendix L	**Usage ban** DL: 1.0 DL: 5.0 (PBBs)			ISO 17881-1	PCB were used in: plasticizer in PVC, ingredient in paint , coatings and adhesives; fire retardant in fabrics, carpets, polyurethane foam, etc. The principal use of PBB was as a fire retardant.
Halogenated Diarylalkanes listed in Appendix M	**Usage ban** DL: 1.0			Extraction following IEC 62321-6 // GC-MS	Used as solvent, plasticizers and fire retardants.
Isocyanates listed in Appendix N	Free content Sum of all: 1.0			EN 13130-8	Isocyanates are the raw materials to produce components of polyurethane foams, spandex fibers, and polyurethane paints.
Monomers Acrylamide (CAS 79-06-1)	**Usage ban** 1.0			Textile: Extraction with MeOH // LC-MS Plastic: 2-Step extraction with THF and MeOH // LC-MS	Acrylamide is primarily to make polyacrylamide and acrylamide copolymers, used in production of dyes, and plastics, and in the treatment of wastewater, including sewage.

SUBSTANCE	LIMIT [MG/KG]			RECOMMENDED SAMPLE PREPARATION // TEST METHOD	POTENTIAL USAGE
	A	B	C		
Other Chemical Substances					
Acetophenone (CAS 98-86-2)	20			Extraction with MeOH // GC-MS	Potential breakdown products in EVA foam when using Dicumyl Peroxide as a cross-linking agent.
Bisphenol A (CAS 80-05-7)	**Usage ban for textile finishing** DL:1.0 Accessories: 50			Extraction with MeOH // ISO 18857-2	Used in the production of epoxy resins, polycarbonate plastics, flame retardants and PVC.
Cresol, all isomers (CAS 1319-77-3)	**Usage ban** DL:10			Extraction with KOH // § 64 LFGB B 82.02-8 or DIN EN ISO 17070	Cresols provides the antibacterial and insecticidal properties, as well as its toxicity and its ability to irritate bare skin.
m-Cresol (CAS 108-39-4)					
o-Cresol (CAS 95-48-7)					
p-Cresol (CAS 106-44-5)					
Dimethylfumarate (CAS 624-49-7)	**Usage ban** DL: 0.1			ISO/TS 16186 // GC-MS	DMFu is an anti-mold agent used in sachets in packaging to prevent the buildup of mold, especially during shipping.
Formamide (CAS 75-12-7)	**Usage ban**			Extraction with MeOH* // GC-MS *Cut the samples into small pieces (2x2mm)	Byproduct in the production of EVA foams.
	50	50	100		

SUBSTANCE	LIMIT [MG/KG]			RECOMMENDED SAMPLE PREPARATION // TEST METHOD	POTENTIAL USAGE
	A	B	C		
Isoquinoline (CAS 119-65-3)	**Usage ban** // Traces: 50 Valid from July 2021			Extraction with MeOH or THF // LC-MS/MS or LC-DAD	Isoquinoline is used in manufacturing of plastics and plastic additives; also used in a variety of products and industries (e.g. in cosmetics, chemical manufacturing)
o-Phenylphenol (CAS 90-43-7)	For textiles:			Extraction with KOH // § 64 LFGB B 82.02-8 or DIN EN ISO 17070	OPP is used for its preservative properties in leather or as a carrier in polyester dyeing processes.
	50	50	50		
	For leather:			ISO 1336	
	50	100	200		
Phenol (CAS 108-95-2)	10	50	100	Extraction with MeOH // GC-MS	Phenol is primarily used to synthesize plastics and related materials. Phenol and its chemical derivatives are essential for production of nylon.
2-Phenyl-2-propanol (CAS 617-94-7)	1.0	10	10	Extraction with MeOH // GC-MS	Potential breakdown products in EVA foam when using Dicumyl Peroxide as a cross-linking agent.
Quinoline (CAS 91-22-5)	50			Extraction with Methanol or THF // LC-MS/MS or LC-DAD	Found as an impurity in polyester and some dyestuffs.

SUBSTANCE	LIMIT [MG/KG]			RECOMMENDED SAMPLE PREPARATION // TEST METHOD	POTENTIAL USAGE
	A	B	C		
Ozone Depleting Substances listed in Appendix O	**Usage ban** for direct use in manufacturing of articles DL: 0.1			Headspace GC-MS	Prohibited from use. Ozone-depleting substances have been used as a foaming agent in PU foams as well as a dry-cleaning agent.
Pesticides listed in Appendix P	**Usage ban** 0.5 applies to sum of pesticides			ASE or Soxhlet Extraction with Acetone/ Hexane // GC-MS or LC-MC	May be found in natural fibers, primarily cotton.
Plasticizers (Phthalates) listed in Appendix Q	**Usage ban** 50			ISO 14389	Esters of ortho-phthalic acid (Phthalates) are a class of organic compound commonly added to plastics to increase flexibility. Phthalates can be found in flexible plastic components (e.g., PVC), Print pastes, Adhesives, Plastic buttons and Polymeric coatings
Polyaromatic Hydrocarbons (PAHs) Listed in Appendix R	**Usage ban**			EPA 8310 EPA 8270D EPA 8275A Refer to AfPS GS	PAHs are natural components of crude oil and are common residues from oil refining. Oil residues containing PAHs are added to rubber and plastics as a softener or extender and may be found in rubber, plastics and coatings. PAHs are often found in the outsoles of footwear and in printing pastes for screen prints.
	Sum of all PAHs: 10				
	Benzo(a)pyrene: 0.2				
	PAHs marked with (*):				
	0.5	0.5	0.5		

SUBSTANCE	LIMIT [MG/KG]			RECOMMENDED SAMPLE PREPARATION // TEST METHOD	POTENTIAL USAGE
	A	B	C		
Polymers					
Polyvinyl chloride (PVC) (CAS 9002-86-2)	**Usage ban** Not detected **Refer to Polyvinylchloride Policy section**			Beilstein test* // FTIR *FTIR measurement only if result of Beilstein test was positive	Polyvinyl Chloride (PVC) is one of the most commonly used thermoplastic polymers in the world. Flexible PVC is used as a replacement for rubber.
Vinyl Chloride Monomer Content (CAS 75-01-4)	5			GB 21550, GB/T 4615	Vinyl Chloride is a precursor for polymerization and may be present in various PVC materials like prints, coatings, and synthetic leather.
Heavy metal analysis - Soluble Lead (CAS 7439-92-1) - Soluble Cadmium (CAS 7440-43-9)	Soluble Lead: 90 Soluble Cadmium: 75			GB 21550	Please refer to the section of Heavy Metal Extractable.
Other Volatile Matter (-)	20 g/m^2			GB 21550	Please refer to the section of Solvents

SUBSTANCE	LIMIT [MG/KG]			RECOMMENDED SAMPLE PREPARATION // TEST METHOD	POTENTIAL USAGE
	A	B	C		
Solvents					
Benzene (CAS 71-43-2)	**Usage ban** DL: 5.0			VDA 278 Headspace GC-MS	These VOCs should not be used in textile auxiliary chemical preparations. They are associated with solvent-based processes such as solvent-based polyurethane coatings and glues/adhesives. They should not be used for any kind of facility cleaning or spot cleaning.
1,2-Dichloroethane (CAS 107-06-2)	**Usage ban** DL: 1.0			Headspace GC-MS	
Dichloromethane (CAS 75-09-2)	**Usage ban** DL: 5.0			Headspace GC-MS	
N-Ethyl-2-pyrrolidone (NEP) (CAS 2687-91-4)	**Usage ban** Traces:			CEN ISO/TS 16189	
	10	10	100		
N-Methylpyrrolidone (NMP) (CAS 872-50-4)	**Usage ban** Traces:			CEN ISO/TS 16189	
	10	10	100		
N,N-Dimethylacetamide (DMAc) (CAS 127-19-5)	**Usage ban with exception of fiber manufacturing** DL: 5.0			CEN ISO/TS 16189	
	Limits for fiber manufacturing (residual fiber solvent):				
	10	50	50		

SUBSTANCE	LIMIT [MG/KG]			RECOMMENDED SAMPLE PREPARATION // TEST METHOD	POTENTIAL USAGE
	A	B	C		
N,N-Dimethylformamide (DMF) (CAS 68-12-2)	**Usage ban with exception of solvent coating, laminating, fiber manufacturing** DL: 5.0 For solvent coating, laminating,fiber manufacturing: 50			CEN ISO/TS 16189	
Tetrachloroethylene (Perchloroethylene) (CAS 127-18-4)	**Usage ban** DL: 1.0			Headspace GC-MS	
Toluene (CAS 108-88-3)	10	50	50	Headspace GC-MS	
Trichloroethylene (CAS 79-01-6)	**Usage ban** DL: 5.0			Headspace GC-MS	
Xylene, all isomers (CAS 1330-20-7)	**Usage ban in textile finishing** DL:1.0			Headspace GC-MS	
m-Xylene (CAS 108-38-3) o-Xylene (CAS 95-47-6) p-Xylene (CAS 106-42-3)	Non-textile articles Traces: 1.0				

SUBSTANCE	LIMIT [MG/KG]			RECOMMENDED SAMPLE PREPARATION // TEST METHOD	POTENTIAL USAGE
	A	B	C		
Tin organic compounds	**Usage ban**				Organotins are used as biocides (e.g., antibacterials) and catalysts in plastic and glue production, and heat stabilizers in plastics/rubber. In textiles and apparel, organotins are associated with plastics/rubber, inks, paints, metallic glitter, polyurethane products and heat transfer material.
Monomethyltin compounds (MMT)	2.0				
Monobutyltin compounds (MBT)	1.0				
Monophenyltin compounds (MPhT)	1.0				
Monooctyltin compounds (MOT)	2.0				
Dimethyltin compounds (DMT)	DL:0.5				
Dipropyltin compounds (DPT)	1.0				
Dibutyltin compounds (DBT)	1.0				
Diphenyltin compounds (DPhT)	2.0				
Dioctyltin compounds (DOT)	1.0			ISO/TS 16179	
Trimethyltin compounds (TMT)	DL:0.5				
Tripropyltin compounds (TPT)	DL:0.5				
Tributyltin compounds (TBT)	DL:0.5				
Triphenyltin compounds (TPhT)	DL:0.5				
Trioctyltin compounds (TOT)	DL:0.5				
Tetraethyltin compounds (TeET)	1.0				
Tetrabutyltin compounds (TTBT)	DL:0.5				
Tetraoctyltin compounds (TTOT)	DL:0.5				
Tricyclohexyltin compounds (TCyHT)	DL:0.5				

Extractable and Total Heavy Metals					
SUBSTANCE	**LIMIT [MG/KG]**			**RECOMMENDED SAMPLE PREPARATION // TEST METHOD**	**POTENTIAL USAGE**
	A	**B**	**C**		
Antimony (Sb) (CAS 7440-36-0)	Textiles and leather:			Textiles: DIN EN 16711-2 (acidic sweat solution) Leather: ISO 17072-1 (acidic sweat solution)	Found in or used as a catalyst in polymerization of polyester, flame retardants, fixing agents and pigments.
	5	10	10		
	Metal parts and non-metal parts other than textiles and leather			EN 71-3 (acidic solution simulating gastric juices) // ISO 17294-2 or DIN EN ISO 11885 KS G ISO 8124-3 (acid solution)	
	60				
Arsenic (As) (CAS 7440-38-2)	**Usage ban** Traces: 0.2			Textiles and others: DIN EN 16711-2 (acidic sweat solution) Leather: ISO 17072-1 (acidic sweat solution)	Arsenic and its compounds can be used in preservatives, pesticides, and defoliants for cotton, synthetic fibres, paints, inks, trims, and plastics.
	25			KS G ISO 8124-3 (acid solution)	

SUBSTANCE	LIMIT [MG/KG]			RECOMMENDED SAMPLE PREPARATION // TEST METHOD	POTENTIAL USAGE
	A	B	C		
Cadmium (Cd) (CAS 7440-43-9)	Non-metal parts (textiles, coating, leather and others) Traces: 0.1			Textiles and others: DIN EN 16711-2 (acidic sweat solution) Leather: ISO 17072-1 (acidic sweat solution)	Cadmium compounds are used as pigments (especially in red, orange, yellow and green); as a stabilizer for PVC; and in fertilizers, biocides, and paints.
	75			KS G ISO 8124-3 (acid solution)	
	Usage ban			Textiles and others: DIN EN 16711-1 (total content) Leather: ISO 17072-2	
	Non-metal parts (textiles, leather and others) Total: 40				
	Metal parts: Total: 40			DIN EN 16711-1	
	Electrical and electronic equipment Total: 100			IEC 62321:2008 Clause 8,9,10 ICP-OES, ICP-MS and AAS	
	Batteries Total: 5			EDXRF, ICP-OES ICP-OES, ICP-MS, AAS	
Barium (Ba) (CAS 10022-31-08)	1000			KS G ISO 8124-3(acid solution)	Barium and its compounds can be used in pigments for inks, plastics, and surface coatings, as well as in dyeing, textile finishes, and leather tanning.
Selenium (Se) (CAS 7782-49-2)	500			KS G ISO 8124-3(acid solution)	May be found in synthetic fibers, paints, inks, plastics and metal trims.

<table>
<tr><th rowspan="2">SUBSTANCE</th><th colspan="3">LIMIT [MG/KG]</th><th rowspan="2">RECOMMENDED
SAMPLE PREPARATION //
TEST METHOD</th><th rowspan="2">POTENTIAL USAGE</th></tr>
<tr><th>A</th><th>B</th><th>C</th></tr>
<tr><td rowspan="5">Chromium (Cr)
(CAS 7440-47-3)</td><td colspan="3">Textiles:
0.5</td><td rowspan="3">DIN EN 16711-2 (acidic sweat solution)</td><td rowspan="5">Chromium compounds can be used as dyeing additives; dye-fixing agents; color-fastness after- treatments; dyes for wool, silk, and polyamide (especially dark shades); and leather tanning.</td></tr>
<tr><td colspan="3">For textiles dyed with chromium containing metal complex dyes:</td></tr>
<tr><td>1.0</td><td>2.0</td><td>2.0</td></tr>
<tr><td colspan="3">Non-metal parts other than textiles and leather:
60</td></tr>
<tr><td colspan="3">If products are covered with a metal layer, including a chromium layer, coating must be constantly in good condition</td><td>EN 71-3 (acid solution simulating gastric juices) // ISO 17294-2 or DIN EN ISO 11885
KS G ISO 8124-3 (acid solution)</td></tr>
<tr><td colspan="3">Leather : no regulation</td><td>-</td></tr>
<tr><td rowspan="4">Chromium Cr(VI)
(CAS 18540-29-9)</td><td colspan="3">Usage ban</td><td></td><td rowspan="4">Though typically associated with leather tanning, Chromium VI also may be used in the “after-chroming” process for wool dyeing (Chrome salts applied to acid-dyed wool to improve fastness).</td></tr>
<tr><td colspan="3">Metal parts and non-metal parts others than leather:
DL: 0.5</td><td>EN ISO 17075-1 or -2</td></tr>
<tr><td colspan="3">Leather:
DL: 3.0</td><td>DIN EN ISO 4044 // EN ISO 17075-1 or EN ISO 17075-2</td></tr>
<tr><td colspan="3">Electrical and Electronic equipment
Total: 1000</td><td>IEC 62321: 2008 Annex B and C</td></tr>
</table>

<table>
<tr><th rowspan="2">SUBSTANCE</th><th colspan="3">LIMIT [MG/KG]</th><th rowspan="2">RECOMMENDED
SAMPLE PREPARATION //
TEST METHOD</th><th rowspan="2">POTENTIAL USAGE</th></tr>
<tr><th>A</th><th>B</th><th>C</th></tr>
<tr><td rowspan="6">Cobalt (Co)
(CAS 7440-48-4)</td><td colspan="3">Textiles and leather:
1.0</td><td rowspan="5">Textiles and others: DIN EN 16711-2
(acidic sweat solution)
Leather: ISO 17072-1
(acidic sweat solution)</td><td rowspan="6">Cobalt and its compounds can be used in pigments, dyestuff, and the production of plastic buttons.</td></tr>
<tr><td colspan="3">For textiles and leather dyed with cobalt containing metal complex dyes:</td></tr>
<tr><td>1.0</td><td>4.0</td><td>4.0</td></tr>
<tr><td colspan="3">Metal parts and non-metal parts others than textiles and leather:</td></tr>
<tr><td>1.0</td><td>4.0</td><td>4.0</td></tr>
<tr><td colspan="3">Total: 40</td><td>Non metal: CPSC-CH-E1002-08.3
Metal: CPSC-CH-E1001-08.3
Coating: CPSC-CH-E1003-09.1</td></tr>
<tr><td rowspan="3">Copper (Cu)
(CAS 7440-50-8)</td><td colspan="3">For textiles and leather (including metal complex dyed materials)</td><td rowspan="2">Textiles and others: DIN EN 16711-2
(acidic sweat solution)
Leather: ISO 17072-1 (acidic sweat solution)</td><td rowspan="3">Copper and its compounds can be found in pigments, and in textiles as an antimicrobial agent.</td></tr>
<tr><td>25</td><td>50</td><td>50</td></tr>
<tr><td colspan="3">Non-metal parts others than textiles and leather:
No regulation</td><td>-</td></tr>
</table>

SUBSTANCE	LIMIT [MG/KG]			RECOMMENDED SAMPLE PREPARATION // TEST METHOD	POTENTIAL USAGE
	A	B	C		
Lead (Pb) (CAS 7439-92-1)	**Usage ban**				May be associated with plastics, paints, inks, pigments and surface coatings.
	Coating, textiles, plastics and leather: Traces:			Textiles and others: DIN EN 16711-2 (acidic sweat solution) Leather: ISO 17072-1 (acidic sweat solution)	
	0.2	1.0	1.0		
	90			KS G ISO 8124-3 (acid solution)	
	Textiles, plastics and leather Total: 40 Metal parts, Coating and Paints: Total: 90			Non metal: CPSC-CH-E1002-08.3 Metal: CPSC-CH-E1001-08.3 Coating: CPSC-CH-E1003-09.1	
	Electrical and Electronic equipment: Total: 1000			IEC 62321:2008 Clause 8,9,10 ICP-OES, ICP-MS and AAS	
	Batteries: Total: 40			EDXRF, ICP-OES ICP-OES, ICP-MS, AAS	
Mercury (Hg) (CAS 7439-97-6)	**Usage ban**			Textiles and others: DIN EN 16711-2 (acidic sweat solution) Leather: ISO 17072-1 (acidic sweat solution)	Mercury compounds can be present in pesticides and as contaminants in caustic soda (NaOH). They may also be used in paints.
	Non-metal parts: Traces: 0.02				
	Metal parts: Traces: 60			EN 71-3 (acid solution simulating gastric juices) // ISO 12846 KS G ISO 8124-3 (acid solution)	

<table>
<tr><th rowspan="2">SUBSTANCE</th><th colspan="3">LIMIT [MG/KG]</th><th rowspan="2">RECOMMENDED
SAMPLE PREPARATION //
TEST METHOD</th><th rowspan="2">POTENTIAL USAGE</th></tr>
<tr><th>A</th><th>B</th><th>C</th></tr>
<tr><td rowspan="3">Mercury (Hg)
(CAS 7439-97-6)</td><td colspan="3">Total: Not Detected
DL:10</td><td>Reference to
Non metal: CPSC-CH-E1002-08.3
Metal: CPSC-CH-E1001-08.3
Coating: CPSC-CH-E1003-09.1</td><td rowspan="3"></td></tr>
<tr><td colspan="3">Electrical and Electronic Equipment:
Total: 1000</td><td>IEC 62321:2008 Clause 7
CV-AAS, CVAFS,ICP-OES and ICP-MS

(AAS—Atomic Absorption Spectroscopy)</td></tr>
<tr><td colspan="3">Batteries:
Total: 5</td><td>ICP, AAS, EDXRF
ICP-OES, ICP-MS, CVAAS

(EDXRF—energy dispersive X-ray fluorescence)</td></tr>
<tr><td rowspan="4">Nickel (Ni)
(CAS 7440-02-0)</td><td colspan="3">Textiles and leather:
1.0</td><td rowspan="3">Textiles and others: DIN EN 16711-2 (acidic sweat solution)
Leather: ISO 17072-1 (acidic sweat solution)</td><td rowspan="4">Nickel can occur as impurities in pigments.</td></tr>
<tr><td colspan="3">For textiles and leather dyed with nickel containing metal complex dyes:</td></tr>
<tr><td>1.0</td><td>4.0</td><td>4.0</td></tr>
<tr><td colspan="3">Metal parts and non metal parts others than textiles and leather:

Usage ban for A and B
0.5 [µg/cm^2/week]</td><td>Release
EN 12472 +A1// EN 1811+A1</td></tr>
</table>

SUBSTANCE	LIMIT [MG/KG]			RECOMMENDED SAMPLE PREPARATION // TEST METHOD	POTENTIAL USAGE
	A	B	C		
Triclosan (CAS 33-80-345)	Not Detected DL: 1.0			By GC analysis	Triclosan can be added to textiles to make them resistant to bacterial growth.
UV stabilizer	**Usage ban**			Extraction with Hexane/Dichloroethane // GC-MS	The four UV stabilizers listed have been used to absorb UV light. This protects the UV light from damaging the plastics, coatings, adhesives, etc. and thus stabilizing them to UV light or natural sunlight.
UV-320 2-benzotriazol-2-yl-4,6-di-tert-butylphenol (CAS 3846-71-7)	Traces: 1000				
UV-327 2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (CAS 3864-99-1)					
UV-328 2-(2H-benzotriazol-2-yl)-4,6-bis(1,1-dimethylpropyl)phenol (CAS 25973-55-1)					
UV-350 2-(2H-Benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (CAS 36437-37-3)					

SUBSTANCE	LIMIT [MG/KG]			RECOMMENDED SAMPLE PREPARATION // TEST METHOD	POTENTIAL USAGE
	A	B	C		
Phenylmercury compounds	**Usage ban**			Acid digestion followed by ICP/AAS analysis	Use as catalysts in polyurethane systems used for coatings, adhesives, sealants and elastomer applications.
Phenylmercury acetate (CAS 62-38-4)	<0.01% of Mercury				
Phenylmercury propionate (CAS 103-27-5)					
Phenylmercury 2-ethylhexanoate (CAS 13302-00-6)					
Phenylmercury octanoate (CAS 13864-38-5)					
Phenylmercury neodecanoate (CAS 26545-49-3)					

Appendices

Appendix A: Alkylphenols and Alkylphenolethoxylates	CAS – No.
Nonylphenol (NP)	several
Octylphenol (OP)	several
Nonylphenolethoxylate $(EO)_{3-20}$	several
Octylphenolethoxylate $(EO)_{3-20}$	several

Appendix B: Arylamines (and corresponding salts)	CAS – No.
p-Aminoazobenzene	60-09-3
o-Aminoazotoluene	97-56-3
4-Aminobiphenyl	92-67-1
2-Amino-4-nitrotoluene	99-55-8
2-Anisidine	90-04-0
Benzidine	92-87-5
4-Chloroaniline	106-47-8
4-Chlor-2-toluidine	95-69-2
4-Chloro-o-toluidinium chloride	3165-93-3
p-Cresidine	120-71-8
2,4-Diaminoanisole	615-05-4
4,4'-Diaminodiphenylmethane	101-77-9
2,4-Diaminotoluene	95-80-7
3,3'-Dichlorobenzidine	91-94-1
3,3'-Dimethoxybenzidine	119-90-4
3,3'-Dimethylbenzidine	119-93-7
3,3'-Dimethyl-4,4'-diaminodiphenylmethane	838-88-0
4-Methoxy-m-phenylene diammonium sulphate; 2,4-diaminoanisole sulphate	39156-41-7
4,4'-Methylenebis-(2-chloraniline)	101-14-4
2-Naphthylamine	91-59-8
2-Naphthylammoniumacetate	553-00-4
4,4’-Oxydianiline	101-80-4

Appendix B: Arylamines (and corresponding salts)	CAS – No.
4,4'-Thiodianiline	139-65-1
2-Toluidine	95-53-4
2,4,5-Trimethylaniline	137-17-7
2,4,5-Trimethylaniline hydrochloride	21436-97-5
2,4-Xylidine	95-68-1
2,6-Xylidine	87-62-7

Appendix C: Asbestos	CAS – No.
Actinolite	77536-66-4
Amosite	12172-73-5
Anthophyllite	77536-67-5
Chrysotile	12001-29-5
Crocidolite	12001-28-4
Tremolite	77536-68-6

Appendix D: Chlorinated Benzenes and Toluenes	CAS – No.
Monochlorobenzene	108-90-7
Dichlorobenzenes, all isomers	Several
1,2-Dichlorobenzene	95-50-1
1,3-Dichlorobenzene	541-73-1
1,4-Dichlorobenzene	106-46-7
Trichlorobenzenes, all isomers	Several
1,2,3-Trichlorobenzene	87-61-6
1,2,4-Trichlorobenzene	120-82-1
1,3,5-Trichlorobenzene	108-70-3
Tetrachlorobenzenes, all isomers	Several
1,2,3,4-Tetrachlorobenzene	634-66-2
1,2,3,5-Tetrachlorobenzene	634-90-2
1,2,4,5-Tetrachlorobenzene	95-94-3
Pentachlorobenzene	608-93-5

Appendix D: Chlorinated Benzenes and Toluenes	CAS – No.
Hexachlorobenzene	118-74-1
Monochlorotoluenes, all isomers	Several
2-Chlorotoluene	95-49-8
3-Chlorotoluene	108-41-8
4-Chlorotoluene	106-43-4
a-Chlorotoluene	100-44-7
Dichlorotoluenes, all isomers	Several
2,3-Dichlorotoluene	32768-54-0
2,4-Dichlorotoluene	95-73-8
2,5-Dichlorotoluene	19398-61-9
2,6-Dichlorotoluene	118-69-4
3,4-Dichlorotoluene	95-75-0
3,5-Dichlorotoluene	25186-47-4
Trichlorotoluenes, all isomers	Several
2,3,4-Trichlorotoluene	7359-72-0
2,3,6-Trichlorotoluene	2077-46-5
2,4,5-Trichlorotoluene	6639-30-1
2,4,6-Trichlorotoluene	23749-65-7
3,4,5-Trichlorotoluene	21472-86-6
a,a,a-Trichlorotoluene	98-07-7
Tetrachlorotoluenes, all isomers	Several
2,3,4,5-Tetrachlorotoluene	76057-12-0
2,3,5,6-Tetrachlorotoluene	29733-70-8
2,3,4,6-Tetrachlorotoluene	875-40-1
a,a,a,4-Tetrachlorotoluene	5216-25-1
Pentachlorotoluene	877-11-2
Chlorotoluene, unspecific mixture	25168-05-2

Appendix E: Chlorinated Phenols	CAS – No.
Monochlorophenols	25167-80-0
2-Chlorophenol	95-57-8

Appendix E: Chlorinated Phenols	CAS – No.
3-Chlorophenol	108-43-0
4-Chlorophenol	106-48-9
Dichlorophenols	25167-81-1
2,3-Dichlorophenol	576-24-9
2,4-Dichlorophenol	120-83-2
2,5-Dichlorophenol	583-78-8
2,6-Dichlorophenol	87-65-0
3,4-Dichlorophenol	95-77-2
3,5-Dichlorophenol	591-35-5
Trichlorophenols	25167-82-2
2,3,4-Trichlorophenol	15950-66-0
2,3,5-Trichlorophenol	933-78-8
2,3,6-Trichlorophenol	933-75-5
2,4,5-Trichlorophenol	95-95-4
2,4,6-Trichlorophenol	88-06-2
3,4,5-Trichlorophenol	609-19-8
Tetrachlorophenols	25167-83-3
2,3,4,5-Tetrachlorophenol	4901-51-3
2,3,4,6-Tetrachlorophenol	58-90-2
2,3,5,6-Tetrachlorophenol	935-95-5
Pentachlorophenols	87-86-5

Appendix F: Colorants with carcinogenic potential	CAS – No.
Acid Red 26	3761-53-3
Acid Red 114	6459-94-5
Basic Violet 3	548-62-9 603-48-5 14426-25-6
Basic Green 4	**Several**
Malachit green	10309-95-2
Malachit green chloride	569-64-2

Appendix F: Colorants with carcinogenic potential	CAS – No.
Malachit green oxalate	2437-29-8
Basic Red 9	569-61-9
Basic Violet 14	632-99-5
Direct Black 38	1937-37-7
Direct Blue 6	2602-46-2
Direct Blue 15	2429-74-5
Direct Brown 95	16071-86-6
Direct Red 28	573-58-0
Disperse Blue 1	2475-45-8
Disperse Orange 11	82-28-0
Disperse Yellow 3	2832-40-8
Pigment Black 25	68186-89-0
Pigment Yellow 34	1344-37-2
Pigment Yellow 157	68610-24-2
Pigment Red 104	12656-85-8

Appendix G: Colorants with allergenic potential	CAS – No.
Disperse Blue 3	2475-46-9
Disperse Blue 7	3179-90-6
Disperse Blue 26	3860-63-7
Disperse Blue 35	12222-75-2 56524-77-7
Disperse Blue 102	12222-97-8
Disperse Blue 106	12223-01-7
Disperse Blue 124	61951-51-7
Disperse Brown 1	23355-64-8
Disperse Orange 1	2581-69-3
Disperse Orange 3	730-40-5
Disperse Orange 37/59/76	12223-33-5 13301-61-6 51811-42-8

Appendix G: Colorants with allergenic potential	CAS – No.
Disperse Red 1	2872-52-8
Disperse Red 11	2872-48-2
Disperse Red 17	3179-89-3
Disperse Yellow 1	119-15-3
Disperse Yellow 9	6373-73-5
Disperse Yellow 39	12236-29-2
Disperse Yellow 49	54824-37-2

Appendix H: Colorants banned for other reasons	CAS – No.
Basic Blue 26	2580-56-5
Direct Yellow 1	6472-91-9
Disperse Yellow 23	6250-23-3
Disperse Orange 149	85136-74-9
Navy Blue A mixture of: disodium (6-(4-anisidino)-3- sulfonato-2-(3,5-dinitro-2-oxidophenylazo)-1- naphtholato)(1-(5-chloro-2-oxidophenylazo)-2- naphtholato)chromate(1-),trisodium bis(6-(4-anisidino)-3-sulfonato-2-(3,5- dinitro-2-oxidophenylazo)-1-naphtholato)chromate(1-) Component 1: CAS-No: 118685-33-9 C39H23ClCrN7O12S.2Na ¦ Component 2: C46H30CrN10O20S2.3Na	EC-Number: 405-665-4 Component 1: 118685-33-9 Component 2: Not allocated

Appendix I: Dioxins and Furans	CAS – No.
Group 1:	**Several**
2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746-01-6
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	40321-76-4
2,3,7,8-Tetrachlorodibenzofuran	51207-31-9
2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4
Group 2:	**Several**
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	39227-28-6
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	57653-85-7
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	19408-74-3
1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6

Appendix I: Dioxins and Furans	**CAS – No.**
1,2,3,4,7,8-Hexachlorodibenzofuran	70648-26-9
1,2,3,6,7,8-Hexachlorodibenzofuran	57117-44-9
1,2,3,7,8,9-Hexachlorodibenzofuran	72918-21-9
2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5
Group 3:	Several
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	35822-46-9
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin	3268-87-9
1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4
1,2,3,4,7,8,9-Heptachlorodibenzofuran	55673-89-7
1,2,3,4,6,7,8,9-Octachlorodibenzofuran	39001-02-0
Group 4:	Several
2,3,7,8-Tetrabromodibenzo-p-dioxin	50585-41-6
1,2,3,7,8-Pentabromodibenzo-p-dioxin	109333-34-8
2,3,7,8-Tetrabromodibenzofuran	67733-57-7
2,3,4,7,8-Pentabromodibenzofuran	131166-92-2
Group 5:	Several
1,2,3,4,7,8-Hexabromodibenzo-p-dioxin	110999-44-5
1,2,3,6,7,8-Hexabromodibenzo-p-dioxin	110999-45-6
1,2,3,7,8,9-Hexabromodibenzo-p-dioxin	110999-46-7
1,2,3,7,8-Pentabromodibenzofuran	107555-93-1

Appendix J: Flame retardants	**CAS – No.**
2,2-Bis(bromomethyl)-1,3-propanediol	3296-90-0
Bis(2,3-dibromopropyl)phosphate	5412-25-9
Chlorinated paraffins, all chain lengths	Several
Paraffin wax, chlorinated	63449-39-8
Paraffin, C_{10}-C_{13}, chlorinated (SCCP)	85535-84-8
Paraffin, C_{14}-C_{17}, chlorinated (MCCP)	85535-85-9
Paraffin, C_{18}-C_{28}, chlorinated (LCCP)	85535-86-0
Hexabromocyclododecan	25637-99-4 3194-55-6

Appendix J: Flame retardants	CAS – No.
	134237-50-6 134237-51-7 134237-52-8
Polybrominated diphenyl ethers (PBDE)	Several
Tetrabromodiphenyl ether (TetraBDE)	40088-47-9
Pentabromodiphenyl ether (PentaBDE)	32534-81-9
Hexabromodiphenyl ether (HexaBDE)	36483-60-0
Heptabromodiphenyl ether (HeptaBDE)	68928-80-3
Octabromodiphenyl ether (OctaBDE)	32536-52-0
Nonabromodiphenyl ether (NonaBDE)	63936-56-1
Decabromodiphenyl ether (DecaBDE)	1163-19-5
Tetrabromobisphenol A	79-94-7
Tetrabromobisphenol A bis(2,3-dibromopropylether)	21850-44-2
Tri(aziridin-1-yl)phosphine oxide (TEPA) Triethylenephosphoramide	545-55-1
Trimethyl phosphate	512-56-1
Tri-o-cresyl phosphate	78-30-8
Tris(2-chloroethyl) phosphate (TCEP)	115-96-8
Tris-(2-chloro-1-methylethyl)phosphate (TCPP)	13674-84-5
Tris-[2-chloro-1-(chloromethyl)ethyl]phosphate (TDCP)	13674-87-8
Tris(2,3-dibromopropyl)phosphate (TRIS)	126-72-7
Trixylyl phosphate	25155-23-1

Appendix K: Fluorinated Greenhouse Gases	CAS – No.
Sulphur hexafluoride – SF6	2551-62-4
Perfluoromethane	75-73-0
Perfluoroethane	76-16-4
Perfluoropropane	76-19-7
Perfluorobutane	355-25-9
Perfluoropentane	678-26-2
Perfluorohexane	355-42-0

Appendix K: Fluorinated Greenhouse Gases	CAS – No.
Perfluorocyclobutane	115-25-3
HFC-23	75-46-7
HFC-32	75-10-5
HFC-41	593-53-3
HFC-43-10mee	138495-42-8
HFC-125	354-33-6
HFC-134	359-35-3
HFC-134a	811-97-2
HFC-152a	75-37-6
HFC-143	430-66-0
HFC-143a	420-46-2
HFC-227ea	431-89-0
HFC-236cb	677-56-5
HFC-236ea	431-63-0
HFC-236fa	690-39-1
HFC-245ca	679-86-7
HFC-245fa	460-73-1
HFC-365mfc	406-58-6

Appendix L: Halogenated Biphenyls, Terphenyls, Napthalenes	CAS – No.
Polybrominated biphenyls (PBBs)	Several
Polychlorinated biphenyls (PCBs)	Several
Polychlorinated terphenyls (PCTs)	Several
Polybrominated terphenyls (PBTs)	Several
Polychlorinated naphthalenes (PCNs)	Several
Polybrominated naphthalenes (PBNs)	Several

Appendix M: Halogenated Diarylalkanes	CAS – No.
Monomethyl-dibromo-diphenyl methane	99688-47-8
Monomethyl-dichloro-diphenyl methane	81161-70-8

Appendix M: Halogenated Diarylalkanes	CAS – No.
Monomethyl-tetrachloro-diphenyl methane	76253-60-6

Appendix N: Isocyanates	CAS – No.
1,3-bis(isocyanatomethyl)benzene (HDI)	3634-83-1
Diphenylmethane-4,4-diisocyanate (MDI)	101-68-8
Hexamethylene diisocyanate (HMDI)	822-06-0
Isophorone diisocyanate (IPDI)	4098-71-9
Tetramethylxylene diisocyanate (TMXDI)	2778-42-9
Toluene-2,4-diisocyanate (2,4-TDI)	584-84-9
Toluene-2,6-diisocyanate (2,6-TDI)	91-08-7

Appendix O: Ozone Depleting Substances	CAS – No.
Ozone-depleting substances (CFC's) class I	**Several**
Trichlorofluoromethane CFC-11	75-69-4
Dichlorofluoromethane CFC-12	75-71-8
1,1,2-Trichloro-1,2,2-trifluoroethane CFC-113	76-13-1
1,1,1-Trichloro-2,2,2-trifluoroethane CFC-113a	354-58-5
1,2-Dichloro-1,1,2,2-tetrafluoroethane CFC-114	76-14-2
1,1-Dichloro-1,2,2,2-tetrafluoroethane CFC-114a	374-07-2
Monochloropentafluoroethane CFC-115	76-15-3
Bromochlorodifluoromethane Halon-1211	353-59-3
Bromotrifluoromethane Halon-1301	75-63-8
Dibromotetrafluoroethane Halon-2402	124-73-2
Chlorotrifluoromethane CFC-13	75-72-9
Pentachlorofluoroethane CFC-111	354-56-3
1,1,2,2-Tetrachloro-1,2-difluoroethane CFC-112	76-12-0
1,1,1,2-Tetrachlorodifluoroethane CFC-112a	76-11-9
Heptachlorofluoropropane CFC-211	422-78-6
Hexachlorodifluoropropane CFC-212	3182-26-1
Pentachlorotrifluoropropane CFC-213	2354-06-5

Appendix O: Ozone Depleting Substances	**CAS – No.**
Tetrachlorotetrafluoropropane CFC-214	29255-31-0
1,1,3-Trichloropentafluoropropane CFC-215	76-17-5
1,2,3-Trichloropentafluoropropane CFC-215	1652-81-9
1,1,1-Trichloropentafluoropropane CFC-215	4259-43-2
1,2,2-Trichloropentafluoropropane CFC-215	1599-41-3
Dichlorohexafluoropropane CFC-216	661-97-2
Monochloroheptafluoropropane CFC-217	422-86-6
Carbon tetrachloride CCl4	56-23-5
1,1,1-Trichloroethane (Methylchloroform)	71-55-6
Methylbromide (CH3Br)	74-83-9
CHFBr2	1868-53-7
CHF2Br	1511-62-2
CH2FBr	373-52-4
C2HFBr4	353-93-5
C2HF2Br3	353-97-9
C2HF3Br2	354-04-1
C2HF4Br	354-07-4
C2H2FBr3	172912-75-3
C2H2F2Br2	75-82-1
C2H2F3Br	421-06-7
C2H3FBr2	358-97-4
C2H3F2Br	359-07-9
C2H4FBr	762-49-2
C3HFBr6	-
C3HF2Br5	-
C3HF3Br4	-
C3HF4Br3	666-48-8
C3HF5Br2	431-78-7
C3HF6Br	2252-79-1
C3H2FBr5	-
Ozone-depleting substances (CFC's) class I (continued)	**Several**

Appendix O: Ozone Depleting Substances	CAS – No.
C3H2F2Br4	148875-98-3
C3H2F3Br3	431-48-1
C3H2F4Br2	460-86-6
C3H2F5Br	460-88-8
C3H3FBr4	-
C3H3F2Br3	666-25-1
C3H3F3Br2	460-60-6
C3H3F4Br	460-67-3
C3H4FBr3	75372-14-4
C3H4F2Br2	51584-25-9
C3H4F3Br	460-32-2
C3H5FBr2	453-00-9
C3H5F2Br	461-49-4
C3H6FBr	1871-72-3
Chlorobromomethane CH2BrCl	74-97-5
Ozone-depleting substances (CFC's) class II	**Several**
Dichlorofluoromethane HCFC-21	75-43-4
Monochlorodifluoromethane HCFC-22	75-45-6
Monochlorofluoromethane HCFC-31	593-70-4
Tetrachlorofluoroethane HCFC-121	354-14-3
Trichlorodifluoroethane HCFC-122	354-21-2
Dichlorotrifluoroethane HCFC-123	306-83-2
Monochlorotetrafluoroethane HCFC-124	2837-89-0
Trichlorofluoroethane HCFC-131	359-28-4
Dichlorodifluoroethane HCFC-132	1649-08-7
Monochlorotrifluoroethane HCFC-133a	75-88-7
HCFC-141	-
Dichlorofluoroethane HCFC-141b	1717-00-6
HCFC-142	-
Monochlorodifluoroethane HCFC-142b	75-68-3
HCFC-151	-

Appendix O: Ozone Depleting Substances	CAS – No.
Hexachlorofluoropropane HCFC-221	422-26-4
Pentachlorodifluoropropane HCFC-222	422-49-1
Tetrachlorotrifluoropropane HCFC-223	422-52-6
Trichlorotetrafluoropropane HCFC-224	422-54-8
HCFC-225	-
Dichloropentafluoropropane HCFC-225ca	422-56-0
Dichloropentafluoropropane HCFC-225cb	507-55-1
Monochlorohexafluoropropane HCFC-226	431-87-8
Pentachlorofluoropropane HCFC-231	421-94-3
Tetrachlorodifluoropropane HCFC-232	460-89-9
Trichlorotrifluoropropane HCFC-233	7125-84-0
Dichlorotetrafluoropropane HCFC-234	425-94-5
Monochloropentafluoropropane HCFC-235	460-92-4
Tetrachlorofluoropropane HCFC-241	666-27-3
Trichlorodifluoropropane HCFC-242	460-63-9
Dichlorotrifluoropropane HCFC-243	460-69-5
Monochlorotetrafluoropropane HCFC-244	134190-50-4
Trichloromonofluoropropane HCFC-251	421-41-0
Dichlorodifluoropropane HCFC-252	819-00-1
Monochlorotrifluoropropane HCFC-253	460-35-5
Dichlorofluoropropane HCFC-261	420-97-3
Monochlorodifluoropropane HCFC-262	421-02-3
Monochlorofluoropropane HCFC-271	430-55-7

Appendix P: Pesticides	CAS – No.
Acetamipirid	135410-20-7 160430-64-8
Aldrine	309-00-2
Azinphos methyl	86-50-0
Azinphos ethyl	2642-71-9
Bromophos-ethyl	4824-78-6

Appendix P: Pesticides	CAS – No.
Captafol	2425-06-1
Carbaryl	63-25-2
Chlorbenzilate	510-15-6
Chlordane	57-74-9
Chlordecone	143-50-0
Chlordimeform	6164-98-3
Chlorfenvinphos	470-90-6
Clothianidin	210880-92-5
Coumaphos	56-72-4
Cyfluthrin	68359-37-5
Cyhalothrin, λ-	91465-08-6
Cypermethrin	52315-07-8
Deltamethrin	52918-63-5
Diazinon	333-41-5
o,p'-Dichlorodiphenyldichloroethane (o,p'-DDD)	53-19-0
p,p'-Dichlorodiphenyldichloroethane (p,p'-DDD)	72-54-8
o,p'-Dichlorodiphenyldichloroethylene (o,p'-DDE)	3424-82-6
p,p'-Dichlorodiphenyldichloroethylene (p,p'-DDE)	72-55-9
o,p'-Dichlorodiphenyltrichloroethane (o,p'-DDT) and its isomers; preparations containing DDT and its isomers	789-02-6
p,p'-Dichlorodiphenyltrichloroethane (p,p'-DDT) and its isomers; preparations containing DDT and its isomers	50-29-3
2,4-Dichlorophenoxyacetic acid, its salts and compounds	94-75-7
Dichlorprop	120-36-2
Dicrotophos	141-66-2
Dieldrine	60-57-1
Dimethoate	60-51-5
Dinoseb and salts	88-85-7
Dinotefuran	165252-70-0
Endosulfan, α-	959-98-8
Endosulfan, β-	33213-65-9
Endrine	72-20-8
Esfenvalerate	66230-04-4

Appendix P: Pesticides	CAS – No.
Fenvalerate	51630-58-1
Heptachlor	76-44-8
Heptachlor epoxide	1024-57-3
Hexachlorocyclohexane (HCH), all isomers	608-73-1
Imidacloprid	105827-78-9 138261-41-3
Isodrin	465-73-6
Kelevane	4234-79-1
Lindane	58-89-9
Malathion	121-75-5
MCPA	94-74-6
MCPB	94-81-5
Mecoprop	93-65-2
Methamidophos	10265-92-6
Methoxychlor	72-43-5
Methyl parathion	298-00-0
Mevinophos	7786-34-7
Mirex	2385-85-5
Monocrotophos	6923-22-4
Nitenpyram	150824-47-8 120738-89-8
Ethyl parathion	56-38-2
Perthane	72-56-0
Phosphamidon	13171-21-6
Profenophos	41198-08-7
Propetamphos	31218-83-4
Quinalphos	13593-03-8
Strobane	8001-50-1
Telodrin	297-78-9
Tiacloprid	111988-49-9
Thiamethoxam	153719-23-4

Appendix P: Pesticides	CAS – No.
Toxaphene	8001-35-2
Tribufos (DEF)	78-48-8
2,4,5-Trichlorophenoxyacetic acid, salts and compounds	93-76-5
Trifluralin	1582-09-8

Appendix Q: Plasticizer	CAS – No.
Bis-(2-methoxyethyl) phthalate (DMEP)	117-82-8
Butylbenzyl phthalate (BBP)	85-68-7
Dibutyl phthalate (DBP)	84-74-2
Di-cyclohexyl phthalate (DCHP)	84-61-7
Diethylhexyl phthalate (DEHP)	117-81-7
Diethyl phthalate (DEP)	84-66-2
Diisobutyl phthalate (DIBP)	84-69-5
Diisodecyl phthalate (DIDP)	26761-40-0 68515-49-1
Diisononyl phthalate (DINP)	28553-12-0 68515-48-0
Di-isooctyl phthalate (DIOP)	27554-26-3
Di-iso-pentyl phthalate (DIPP)	605-50-5
Dimethyl phthalate (DMP)	131-11-3
Di-n-hexyl phthalate (DNHP)	84-75-3
Di-n-octyl phthalate (DNOP)	117-84-0
Dinonyl phthalate (DNP)	84-76-4
Di-n-pentyl phthalate (DnPP)	131-18-0
Di-n-propyl phthalate (DPRP)	131-16-8
n-Pentyl-isopentyl phthalate	776297-69-9
1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP)	71888-89-6
1,2-Benzenedicarboxylic acid, benzyl C7-9-branched and linear alkyl esters	68515-40-2
1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP)	68515-42-4
1,2-Benzenedicarboxylic acid, dipentyl ester, branched and linear	84777-06-0
1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4

Appendix R: Polyaromatic Hydrocarbons (PAHs)	CAS – No.
Acenaphtylene	208-96-8
Acenaphthene	83-32-9
Anthracene	120-12-7
Benzo(a)anthracene*	56-55-3
Benzo(b)fluoranthene*	205-99-2
Benzo(j)fluoranthene*	205-82-3
Benzo(k)fluoranthene*	207-08-9
Benzo(ghi)perylene	191-24-2
Benzo(a)pyrene	50-32-8
Benzo(e)pyrene*	192-97-2
Chrysene*	218-01-9
Dibenzo(a,h)anthracene*	53-70-3
Fluoranthene	206-44-0
Fluorene	86-73-7
Indeno(1,2,3-cd)pyrene	193-39-5
Naphthalene	91-20-3
Phenanthrene	85-01-8
Pyrene	129-00-0

RSL Testing Procedure

RSL Testing Guideline

The following table provides testing guidance for suppliers in developing their own RSL compliance testing and chemical management programs and is used as a basis for CSC routine and random RSL testing programs. Suppliers must restrict the use of all chemicals listed in the RSL regardless of whether testing is required. The substances listed in the table represent a selection of high risk chemicals commonly found by material type. Higher risk test items are indicated by (●) and Lower risk test items are indicated by (○).

Materials	Textile			Leather		Metal	Polymers	Glue	Wood	Packaging material	If any coating or finishing on top, please apply below in extra		
Test items Apparel/Accessory/ Equipment	Natural	Synthetic/ Blend	Coated Ink/Printed	Natural	Coated						Lamination	DWR [12]	Flame retardant
Allergenic Dyes [6,8,10]		●	●										
AP [8,9]	○	○	○	○	○		○						
APEO [8,9]	●	●	●	●	●						○		
Arylamines and salts [6,8,10]	●	●	●	●	●								
Carcinogenic Dye [6,8,10]	●	●	●										
Chlorinated Benzenes and Toluenes		●											
Chromium (VI) [10]				●	●								
DMFa, NMP, DMAc			● (PU)		● (PU)		● (PU)				● (PU)		
Extractable Heavy Metal	●	●	●										
Formaldehyde [8,9]	●	●	●	●	●				●				
MRSL								●					
Nickel Release [9]						●							
Organotin [10] -TBT, TPhT, DBT, DOT	○	○	○	○	○		● (trims only)	●			●		
Packaging Heavy Metals [8,10]										●			
PAHs [10]			● (if black plastic print)		● (if black)		● (if black)				● (if black)		
PCP [8,9]				●	●				●				
PFOS and PFOA related substances [9]												●	
Phthalates [8,9]			● (if plastic print)		●		●	●			●		
Quinoline [6,8,10,13]		●											
TCEPand TDCPP [8.9]													●
Total Cadmium [8,10]			○		○	○	●				○		
Total Lead [7,8,10]			●	○	○	●	●				●		

Footnote:

[6] Colored materials, coated/ ink/ printed on fabric require Arylamine and salts, allergenic dye and disperse dye testing, uncolored materials are exempt.

[7] Additional Lead testing may be required for materials used in children's products according to CPSIA.

[8] All testing shall be done in composite of 3-in-1 test, including total Cadmium whose DL is 10 ppm and PAHs.

[9] Testing shall be done per material

[10] Testing shall be done per color per material

[11] Polymer example: EVA, PU form, TPU, TPR, Rubber, Nylon, TPE, latex and PU.

[12] DWR = Durable water repellant

[13] Test together with Carcinogenic and allergenic dyes

Testing Requirement

Testing should be performed by suppliers on an ongoing basis to monitor compliance with the RSL requirements. Test reports or related documents may be required at any time to demonstrate compliance with the RSL. Testing may be part of a routine or random testing program and must be conducted at the supplier's expense. Testing must be done by a CSC-approved laboratory, see *Columbia Approved RSL Testing Laboratories* section of this manual. Where the supplier controls the selection and sourcing of materials or components, they are responsible for demonstrating compliance and testing upon request.

CSC may conduct additional random testing throughout the supply chain. Results from random testing supersede all previous test results. Suppliers will be held responsible for any material or product that fails to meet the standards of the RSL.

All children's products must comply with the US Consumer Product Safety Improvement Act (CPSIA) and relevant global requirements. Children's products may require additional testing.

Sampling and Test Request Procedures

1. According to the testing guideline above or at CSC's request all materials and/or finished goods needed for testing must be taken from the first production lot unless otherwise specified.
2. All sample materials and finished goods used for testing must be representative in all respects, of those used or intended to be used in production of CSC products. If there is any finished good finishing processes such as garment wash or garment dye, suppliers shall make sure the submitted sample is tested after finishing.
3. Composite testing of up to 3 colors of the same material may be acceptable for certain test items. If needed, consult Intertek for sample quantities and composite instructions.
4. All the testing must be applied on the actual color. Primary color testing is not allowed unless with product compliance team approval in prior (ie. Indvidual red material and blue material test result cannot represent purple material testing)
5. Complete a CSC RSL Test Request Form (TRF) making sure to include all required information.
6. Submit TRF and required samples to Intertek for testing.
7. Please advise Intertek they are required to report test results directly to the CSC Liaison Office originating the test request and to RSL@columbia.com. All test reports must be in English.
8. If any test results in a failure, production must be stopped, and all suspect products must be put on hold. **Non-conforming product must not be shipped.**
    a. Suppliers are required to fill in the RSL Failure Remediation Form and immediately contact the appropriate CSC contact for further action. CSC will work with the supplier to determine corrective action which may include canceling the order.
    b. Retesting may be required as directed by CSC.
    c. Testing records must be kept by the supplier for a minimum of 5 years.

Columbia Approved RSL Testing Laboratories

Global Account Manager

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America

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Columbia Sportswear Company RSL Contact Information

If you have any questions about the Columbia Sportswear Company RSL please refer to the regional contacts listed below.

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Revision Record

Date	Section	Page	Changes
Aug 01 2012	Previous version	-	-
May 12 2014	Washington Children's Safe Product Act	7	Added section
May 12 2014	EU REACH - SVHC	7	Inform CSC of any SVHC > 0.1% by weight per article
May 12 2014	RSL	9-17	Azo Dyes, Disperse Dyes, Nickel Release - Test method updated
May 12 2014	RSL	10-20	PFOA, Phthalates, Carcinogenic dyes, PAHs, Heavy metals in packaging - Added
May 12 2014	RSL	13	Fluorinated Greenhouse Gases – Changed requirement to "prohibited"
May 12 2014	RSL	15	Flame retardants – Changed CSC requirement to "prohibited"
May 12 2014	RSL	19	PVC usage requirements revised
May 12 2014	Policy on Textiles, Fibers, and Skins Derived from Animals	24	Animal material restrictions revised
May 12 2014	RSL and Product Safety Procedure	25	RSL test sample compositing procedure revised
May 12 2014	RSL and Product Safety Procedure	25	Disperse dyes included in synthetic testing package. PAHs included in plastic testing package for footwear
May 12 2014	Columbia Approved RSL Testing Laboratories	28	Laboratory contacts revised
May 12 2014	Columbia Sportswear Company contact list	34	CSC contacts revised
July 01 2015	REACH	8	Revise to material level requirement for complex articles
July 01 2015	Biocide Products Regulation	9	Added section
July 01 2015	Reporting Regulations - Washington Children's Safe Product Act	9	Merge into a new Reporting Regulation section
July 01 2015	Reporting Regulations	10	Vermont reporting regulation is added
July 01 2015	Reporting Regulations	10	Maine reporting regulation is added
July 01 2015	California Proposition 65	10	California Proposition 65 is added
July 01 2015	RSL	11,23	APEOs and AP, Organotin Compounds - Prohibition on the usage of active biological substance in EU added in chemical description

Date	Section	Page	Changes
July 01 2015	RSL	11-24	Disperse dyes, Solvents, Pesticides, Fluorinated Greenhouse Gases, Flame Retardants, Total and Released Metal Content , Miscellaneous, PVC - Restricted Chemicals added
July 01 2015	RSL	11-26	APEOs and AP, Disperse Dyes, Carcinogenic Dyes, Solvents, Total and Released Metal Content , Miscellaneous, PAHs - CSC restrictions limit updated
July 01 2015	RSL	11-26	APEOs and AP, Disperse Dyes, Carcinogenic Dyes, Solvents, Pesticides, Fluorinated Greenhouse Gases, Total and Released Metal Content, Organotin Compounds, Miscellaneous, PAHs - Test method updated
July 01 2015	RSL	20	Extractable Heavy Metals (Acidic solution, Children's product) added
July 01 2015	RSL	21	Total and Released Metal Content - Definition of prolonged contact added, Antimony, Arsenic, Cobalt and Mercury requirement are added
July 01 2015	RSL	23	Nitrosamine in Rubber - added
July 01 2015	Packaging Restrictions	27	No change of requirement but separate in a new section
July 01 2015	Electrical and Electronic Equipment Policy	30	Metals in Batteries - CSC mercury restriction revised
July 01 2015	Policy on Textiles, Fibers, and skins Derived from Animals	31	Add dog and cat fur restriction
July 01 2015	Policy on Nanotechnology	31	Section added
July 01 2015	Policy on DWR Chemical	33	Section added
July 01 2015	RSL and Product Safety Testing Procedures	34	Testing Guidelines revised
July 01 2015	RSL and Product Safety Testing Procedures	35	Sampling and test request procedures revised – Finished good finishing sample submission requirement added
July 01 2015	Columbia Approved RSL Testing Laboratories	37-40	Laboratory contacts revised
July 17 2017	Cover page	-	Remove Montrail and Outdry logo
July 17 2017	Introduction	7	Remove Montrail and Pacific Trail from introduction
July 17 2017	Regulatory Requirements	9, 11	Revised term of regulation to Registration for REACH, Updated SVHCs requirement to 0.1% weight by weight Added Oregon Toxic Free Kids Act and its footnote

Date	Section	Page	Changes
July 17 2017	bluesign® system Partnership	12	New added section
July 17 2017	Chemical Management Policy	12	New added section
July 17 2017	RSL	13-59	Adopt bluesign RSL
July 17 2017	MRSL	60	Formaldehyde – Test method update
July 17 2017	Conflict Minerals and Policy on Textiles, Fibers and Skins Derived from Animals	-	Section removed
July 17 2017	Policy on PVC	63	Section added
July 17 2017	Flame retardants in children's product	64	Section added
July 17 2017	RSL Testing Guideline	65	Added wood in material matrix; Test substances name updated; Footnotes updated
July 17 2017	Glossary of Terms/Acronyms	67	Updated terms/acronmys
July 17 2017	Columbia Approved RSL Testing Laboratories	68	Laboratory contacts revised
July 17 2017	Columbia Sportswear Company RSL Contact Informaiton	72	CSC contacts revised
July 31 2020	Cover page	-	Version change, split into Apprel, Accesorry, Equipment and Footwear.
July 31 2020	Re-order the section sequence	All	Consolidate policy sections
July 31 2020	Introduction	4	Update the content about the separation of Apparel, Accessory and Equipment from Footwear manual
July 31 2020	Introduction	4	Add statement with content of "All the RSL manual content is not be changed without the approval of Product Compliance Team".
July 31 2020	CMP	8	Revise the CMP link
July 31 2020	REACH	17	Add the request of "ensure the article contain < 0.1% of candidate list of SVHC"
July 31 2020	RSL	19	Adopt to bluesign® 10.0 version and adding potential usage
July 31 2020	RSL	19	Effective from Fall 21
July 31 2020	RSL	19	Revise the Footnote "6"
July 31 2020	RSL	22	Revise detection limit of formaldehyde as 15 mg/kg and limit for Usage C as 75 mg/kg

Date	Section	Page	Changes
July 31 2020	RSL	22-45	Aniline, PFHxA, Heptadecafluoro-1-iodooctane, 1H,1H,2H,2H-Perfluorodecyliodide, 8:2 FTOH, Perfluorooctylethanol**, Perfluorooctylethyl acrylate or methacrylate**, Phenol, Quinoline, UV stabilizer - Added as bluesign version 10.0
July 31 2020	RSL	22-45	Plasticizers, Polyaromatic Hydrocarbons (PAHs), Polyvinyl chloride (PVC) - Restriction limit Updated as industrial RSL
July 31 2020	RSL	22-45	Chlorinated Phenols, Flame retardants, Halogenated Biphenyls, halogenated Terphenyls, halogenated Naphthalenes, Cresol, all isomers, o-Phenylphenol, Antimony (Sb), Arsenic (As), Cadmium (Cd), Chromium (Cr), Chromium Cr(VI),Cobalt (Co), Copper (Cu), Lead (Pb), Mercury (Hg), Nickel (Ni) - Test method update
July 31 2020	RSL	35-36	Solvents (VOC) for both substances and restrictions limit update
July 31 2020	RSL	36	DMF limit update
July 31 2020	RSL	37	MPhT, DPT, TeET in Tin organic compounds - Added as bluesign 10.0
July 31 2020	RSL	42	Total Lead in substrate restrictions limit update as regulation
July 31 2020	RSL	45	Remove Nitrosamines sections.
July 31 2020	RSL	45	Add Phenylmercury compounds
July 31 2020	Appendices	46-63	Adopt bluesign 10.0 version update with Arylamines, Colorants with carcinogenic potential, Colorants banned for other reasons, Flame retardants, Pesticides
July 31 2020	Appendices	49	Moving CMR dyestuff Basic Violet 3 from Appendix H to Appendix F
July 31 2020	Appendices	61	Add 5 REACH CMR phthalate in Appendix Q
July 31 2020	RSL Testing Guideline	63	Revise material type in Matrix
July 31 2020	RSL Testing Guideline	63	Mandatory items replaced with higher risk test items, supplementary items replaced with lower risk test items.
July 31 2020	RSL Testing Guideline	63	Remove “Footwear only” from PAHs in RSL testing guideline
July 31 2020	RSL Testing Guideline	63	Add DMFa, NMP, DMAc, PCP for leather, add Azo Dyes and corresponding salts, PFOA-related substance, Extractable Heavy Metal, Chlorinated Benzenes and Touenes, and Quinoline
July 31 2020	RSL Testing Guideline	63	Delete “white” in Footnote “6”
July 31 2020	RSL Testing Guideline	63	Add footnote “11” of Polymers, “12” of DWR and “13” of Quinoline
July 31 2020	Columbia Approved RSL Testing Laboratories	65-68	Laboratory global contacts revised

Date	Section	Page	Changes
July 31 2020	Columbia Sportswear Company RSL Contact Information	69	CSC contacts revised