LEVI STRAUSS & CO.

Product Safety by Design Framework for Restricted Substances List(“RSL”)

February 2025

This RSL framework States Requirements for Materials, Parts, Chemicals, Components, Packaging and Other Goods (including Sundries)

For questions, e-mail: rsl@levi.com

Supersedes all previous versions for products distributed during the S1:2026 Season and thereafter

Issue: February 2025

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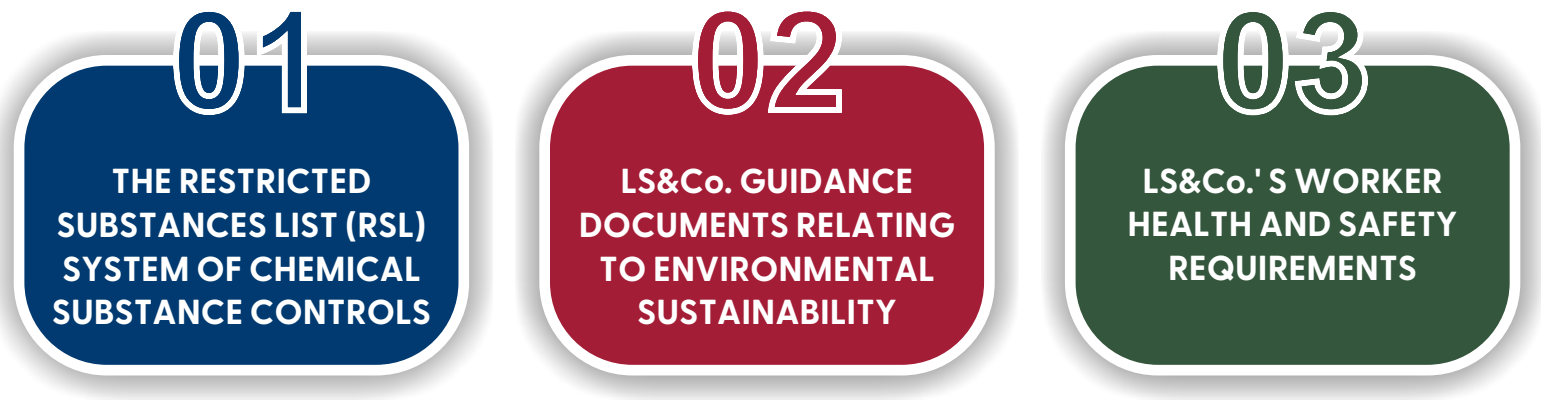
SECTION – 1

OVERVIEW OF LS&Co. RESTRICTED SUBSTANCES LIST (RSL)

OVERVIEW OF LS&Co. RESTRICTED SUBSTANCES LIST (RSL)

LS&Co. is committed to conducting its business in a sustainable manner designed to protect consumers, workers, the environment and the LS&Co. brands. We do so by building principally upon three pillars:



These pillars and all other LS&Co. Environmental, Health, and Safety requirements set out on LS&Co.' s website www.levistrauss.com apply to all Suppliers as well as Sources in LS&Co.' s global supply chain.

RESTRICTED SUBSTANCES LIST – OBJECTIVES

The objectives of LS&Co. RSL requirements are intended to:

- Ensure that Materials, Chemicals and Other Goods comply with the applicable chemical content and chemical exposure laws of every governmental jurisdiction in which those products are fabricated, manufactured, processed or distributed; and
- Protect the health and safety of consumers handling LS&Co. Labeled and/or distributed finished products

ADOPTION OF AFIRM RSL

In 2004, LS&Co. was one of the founding members of the AFIRM group (Apparel Footwear Industry RSL Management Group - https://afirm-group.com/ and has aligned with AFIRM Group RSL for many years. Effective January 2022 LS&Co. has adopted the AFIRM Group RSL and AFIRM Packaging RSL.This is to drive industry collaboration and provide the apparel and footwear supply chain with a single tool for effective management of Restricted Substances (as a 'Chemical Substances Control Program ') to reduce the use and impact of harmful substances in factories where LS&Co. labeled , and /or distributed products are manufactured. The AFIRM RSL can be found in website https://afirm-group.com/. For a glossary of Terms found in this document, please see Appendix 7 as well as the AFIRM Group RSLs.

LS&Co. RSL REQUIREMENTS ABOVE AFIRM RSL

The LS&Co. specific requirements above AFIRM RSL are set out in this 'Product safety by design framework' guidance document in different sections as stated below:

- LS&Co. RSL Usage ban policy and Priority chemicals list requirements (Section-2)
- LS&Co. Emerging issues policy for CMR, EDCs, Skin Sensitizers and PBT chemicals (Refer to Appendix-4)
- LS&Co. Code of Conduct requirements (refer to Section-6) include,
  - A. Supplier and Sources commitment
  - B. Suppliers and Sources Management System Requirements supporting RSL compliance at the factory
  - C. Obligation to Comply with EU REACH and All Other Governmental Requirements
  - D. Obligation to Comply with US States Chemicals of High Concern in Children Products and its Reporting Requirements
  - E. LS&Co. Chemical Information Log (CIL)

Please note that the AFIRM RSL - and LS&Co. specific requirements above AFIRM RSL - apply to all materials, parts, chemicals, components, packaging and other goods (including sundries) that are sourced or supplied for direct or eventual use in products to be labeled, manufactured and/or distributed by LS&Co. This listing includes but is not limited to, finished products, including apparel, non-apparel, footwear, accessories, packaging and other products.

APPLICATION

LS&Co. requires that all Materials, Chemicals and Other Goods provided by Suppliers and Sources (as defined next column) comply with LS&Co. RSL Usage ban policy and Priority chemicals list requirements and the "Limit Value Finished Product " (LVFP) levels specified in AFIRM Group RSLs. To ensure that the finished products meet the LVFP concentrations set out in AFIRM Group RSLs . Suppliers and Sources must implement an appropriate program of testing and quality assurance.

In addition, Suppliers and Sources must ensure that the chemicals used or supplied in the manufacturing of LS&Co. labeled/or and distributed products are used in a manner consistent with any Safety Data Sheet (SDS), Technical Data Sheet (TDS) and any other specifications and warnings provided by any Supplier or Source.

Moreover, by agreeing to furnish any Materials, Chemicals, or Other Goods to LS&Co. or by agreeing to comply with LS&Co. RSL requirements as stated above, each Supplier and Source must ensure that each Material, Chemical and Other Goods supplied for use in the manufacturing and distribution of any LS&Co. labeled and LS&Co. distributed product does not contain any substance in any manner which would violate:

(a) LS&Co. RSL Usage ban policy and Priority chemicals list requirements
(b) AFIRM RSL and
(c) The applicable law of any country and jurisdiction in which the Supplier, Source, or LS&Co. conducts business and in any jurisdiction in which it ships Materials, Chemicals, or Other Goods

In addition, each Supplier is similarly responsible and also liable to LS&Co. for ensuring that each of its Sources similarly complies with LS&Co. RSL requirements and the aforesaid applicable laws.

Any violation of the LS&Co. RSL requirements or the aforesaid applicable laws is a violation of all contracts to supply Materials, Chemicals and Other Goods to LS&Co.

Throughout this document, references are made to Supplier(s) and Source(s). LS&Co. defines them for the purposes of the RSL as follows:

SUPPLIER(S) are defined as factories and other businesses, including licensees, that contract with LS&Co. to produce finished products, apparel, footwear, accessories and other products for LS&Co. Suppliers may also contract with Sources for Materials, Chemicals, and Other Goods for direct or eventual use in fabricating, manufacturing, or other processing of LS&Co. labeled and/or distributed apparel, non-apparel, footwear, accessories and other products.

SOURCE(S) are defined as business partners of Suppliers that provide Materials, Chemicals, and Other Goods for direct or eventual use in fabricating, manufacturing or other processing of LS&Co. labeled and/or distributed apparel, footwear, accessories and other products. For a glossary of other terms/Definitions found in this document, please see Appendix 7 .

SECTION – 2

LS&Co.'s RSL USAGE BAN POLICY, PRIORITY CHEMICALS LIST AND OTHER RESTRICTIONS

LS&Co.' S RSL USAGE BAN POLICY, PRIORITY CHEMICALS LIST AND OTHER RESTRICTIONS

In addition to the chemical restrictions in the AFIRM RSLs, LS&Co.'s has further restrictions on all anti microbials,all applied flame-retardant finishes, and all per-fluoroalkyl substances.

Antimicrobial Substances

- Anti-microbial substances are used to prevent damage to underlying substrates by bacteria and mold in use and are sometimes used to deliver microbe-killing performance for the end- user (for example to prevent odor)
- Many anti -microbial substances are legally restricted and other pieces of legislation require that specific chemical types can only be used after they are assessed and authorized for the end - use(s) they offered.
- LS & Co . does not allow the use of any anti-microbials, including nanotechnology materials to protect substrates or to deliver customer benefits
- **Biocides used as preservatives for chemicals applied to garments:** Suppliers are required to declare the active ingredient substances in these chemicals to LS& Co. along with test result data on residues remaining on the garment after their application.
- **Biocides used to preserve garments from deterioration:** This class of antimicrobials including biocides, is used to preserve garments during transport, such as dimethyl fumarate is banned.
- **Biocides used to kill odor - causing bacteria from human skin:** The use of these antimicrobials is categorically banned.
- The use of preservatives to prevent raw material or chemical formulation spoilage is permitted but the specific chemicals must be authorised by the relevant regulatory body.
- The use of alternative chemistries (such as odor- absorbing technology) must be approved by LS& Co. Product Safety Teams.

Flame Retardant Chemicals

- Flame retardant chemicals are used to inhibit the formation and spread of fire on substrates.
- Many flame-retardant chemicals are restricted by legislation.
- No Flame Retardants are allowed on LS&Co. products. Upon request, the absence of the flame retardants is to be tested for confirmation of RSL compliance.
- There are some end uses in some jurisdictions where flammability standards must be met to place products on the market.
- This must be achieved by substrate selection (e.g. fiber type) and construction (e.g. type of knit /weave and weight of fabric) rather than the application of flame-retardant chemicals.
- If suppliers believe there is a legal requirement to meet specific flammability legislation that can only be met using flame retardant chemicals, this must be discussed with LS& Co. Product Safety teams before orders are being confirmed.

Perfluoroalkyl / Polyfluoroalkyl Substances

- Per-fluoroalkyl substances are used to provide water and stain-repellent properties to the surfaces of substrates.
- Some PFAS are restricted by legislation and others are on the regulatory pathway with further restrictions anticipated.
- LS&Co. does not permit the use of any PFASs for any end-use.
- The presence of PFAS in a product or product component, as measured in‘Total Organic Fluorine’ is banned
- LS&Co.'s goal is to phase out the use of any PFASs in the manufacturing and packaging of all of its labeled and distributed products . Any fluorine - containing organic chemicals that are used in the process of manufacturing or packaging of LS & Co. labeled or distributed products to impart properties such as water repellency , stain management or others to the final products are not allowed to be used without prior approval of LS&Co.
- This restriction applies to all finishes, coating, and membranes that are used to deliver technical water repellent and stain management performances.
- Alternative chemistry must meet LS&Co. performance requirements with respect to repellency.

Di- and / or polyisocyanates

- Di- and /or polyisocyanates (see samples , CAS numbers and test methods in the table below) are used in several applications : as one reactive component for polyurethanes or polyureas which are material for products , as well as in glues, coatings , filling materials and similar . The chemical reaction which produces the material for the product may take place in one step when practically all amount of isocyanates have been reacted into a non-hazardous polymer (polyurethane or polyurea) or in two steps when in the first step the reactive isocyanate group is blocked by specific substance (s) and in the second step the blocked isocyanate has been reacted into the final polymer.

- There remains very small amount un-reacted di- and/or polyisocyanates in the final product.

- LS&Co 's. does not prohibit the use of di- and /or polyisocyanates as starting substances in the above described or similar processes but require to use such technology to achieve a remaining di- and /or polyisocyanates content in the final material as low as stated in the table below.

Diisocyanates	CAS No	Limit Value Final Product (mg/kg)	Test Method
Diphenylmethane diisocyanate (MDI)	Various	Free: 1; Blocked: 50	Analysis of free isocyanates: Solvent extraction / HPLC Analysis of relesable (blocked) isocyanates: Solvent extraction / GC-MS with injector block temperature at 300°C, confirmation at 180ºC
Hexamethylene diisocyanate (HDI)	822-06-0	Free: 1; Blocked: 50	
Isophorone diisocyanate (IPDI)	4098-71-9	Free: 1; Blocked: 100	
Tetramethylxylene diisocyanate (TMXDI)	2778-42-9	Free: 1; Blocked: 100	
Toluene diisocyanate (TDI)	584-84-9 & 91-08-7	Free: 1; Blocked: 15	
Napthylene-1,5, di-isocyanate (1,5-NDI)	3173-72-6	Free: 1; Blocked: 15	

- There is a legal requirement in the Annex XVII of REACH regulation with requesting any user of di- and/or polyisocyanates to pass training and re-training courses about the safe use of these chemicals. This should also be considered.
- Use of blocked diisocyanates (oxime/pyrazole- or self-blocked) based on any other diisocyanates and pre-polymers (than listed) on the garment/ fabric finishes and/or prints needs prior approval from LS&Co. Product Safety.
- MDIs include monomers, isomers, oligomers, and polymers with various CAS Numbers.
- TDI restriction applies to both 2,4-TDI (584-84-9) and 2,6-TDI (91-08-7), individually.

POLYMERS

- The OECD definition of a polymer is used in most national regulations: "A polymer means a substance consisting of molecules characterized by the sequence of one or more types of monomer units and comprising a simple weight majority of molecules containing at least three monomer units, which are covalently bound to at least one other monomer unit or other reactant , and consists of less than a simple weight majority of molecules of the same molecular weight ." Such molecules must be distributed over a range of molecular weights , wherein differences in the molecular weight are primarily attributable to differences in the number of monomer units.

- Polymers are exempted from notification and/or registration requirements in several countries (see for details: https://chemicalwatch.com/ 24516/regulating-polymers).

- One of the hazardous features of polymers is their unreacted monomer substance content which may vary through large ranges depending on the suppliers. Because the monomer substances are classified as hazardous , frequently as carcinogenic, mutagenic , sensitizing , etc., it is essential to know and to limit this content in all material used for manufacturing LS&Co. products.

- LS&Co. requires all Supplier (s) and Source (s) to inform about the unreacted monomer substance content above 10 ppm in any material consisting of polymers in the Chemical Information Log in case the monomer substance is classified as hazardous to health according to the CLP regulation.

- To use any PVC as material (CAS: 9002-86-2) is banned (Beilstein Test for screening, FTIR for confirmation).

- Melamine-based resins are a) prohibited for use at coating; b) require LS&Co.'s prior approval for use as cross-linker.

Additionally, the table below provides **LS&Co. Priority chemicals lis**t with the aim,

- To eliminate them from the supply chain to the final product with their presence only in case of unintentional or unavoidable contaminants.

- To allow their use as intermediary substances which are chemically transformed into other substances in any of the processes to the final product which processes shall eliminate their amount in the final product.

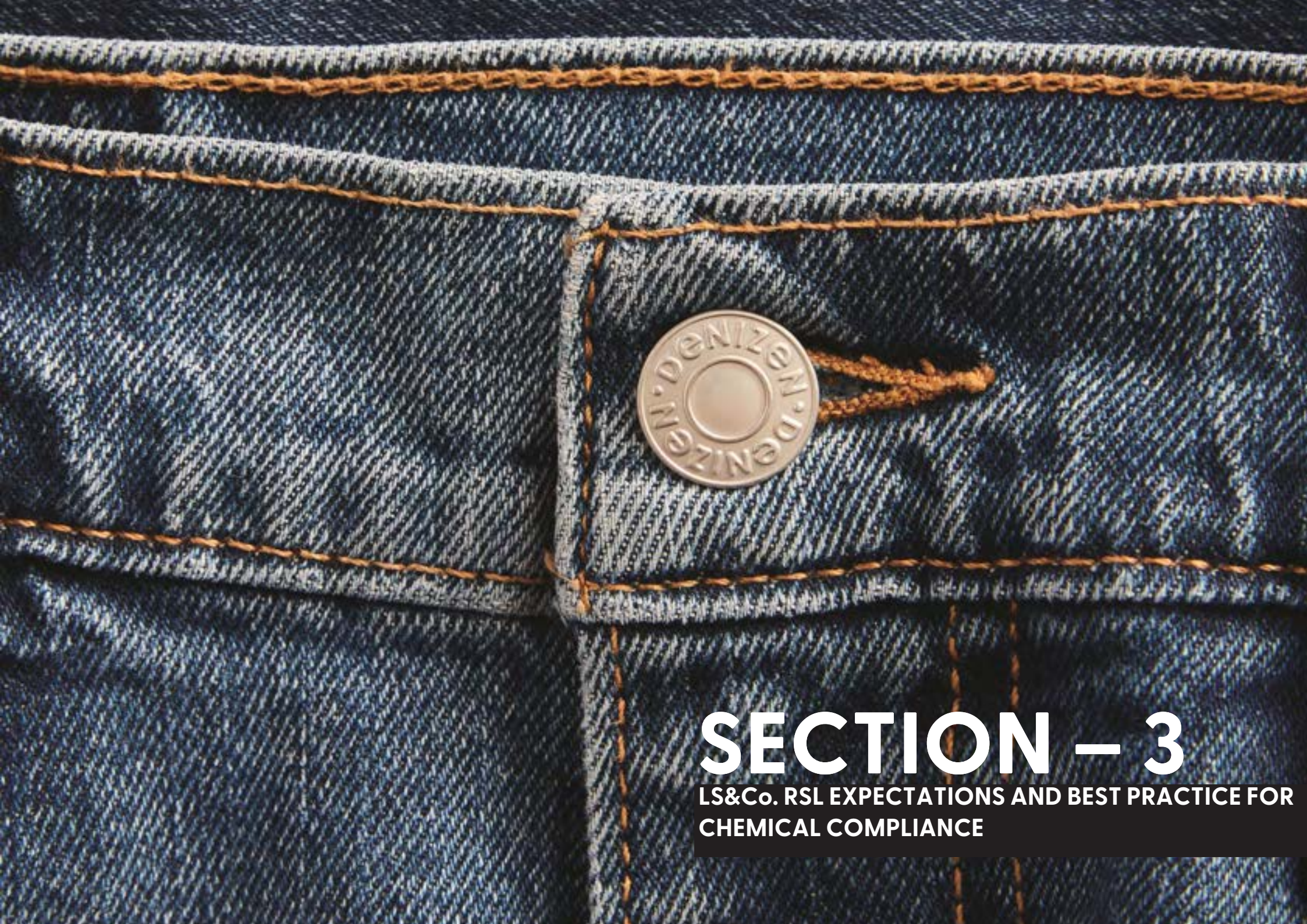
In both cases the concentration of the substances on the list in the final product shall be below the “Allowable Trace (TR) limit specified where-ever in AFIRM Group RSL or otherwise the concentration of the substances should not be detected. LS&Co. considers these priority chemicals list as ‘RSL Usage ban’ category

Table A – LS&Co.'s Priority Chemicals list

S.No	LS&Co. Priority chemicals List	CAS No
1	Aromatic Amines from Azo Colorants and Arylamine Salts[1]	Various, refer AFIRM RSL
2	Disperse Dyes and other Forbidden dyes	
3	Navy Blue Colorant	
4	Chlorophenols	
5	Triclosan[9]	3380-34-5
6	Dimethyl fumarate (DMFu)	624-49-7
7	Chlorinated Benzenes and Toluenes	Various, refer AFIRM RSL
8	Phthalates (All esters of Ortho-phthalic acid. Including, but not limited to, the AFIRM RSL list)	
9	Flame Retardants	
10	Cadmium (Cd) compounds	
11	Lead (Pb) compounds[2]	
12	Arsenic (As) compounds	
13	Mercury (Hg) compounds	
14	Chromium (Cr (VI) Hexavalent[3]	18540-29-9
15	Organotin Compounds	Various
16	Tetrachloroethylene (Perchloroethylene)	127-18-4
17	Trichloroethylene (TCE)	79-01-6
18	N-Methyl pyrrolidone (NMP)	872-50-4
19	Benzene	71-43-2
20	Penta chloroethane	76-01-7
21	1,1,1,2- Tetrachloroethane	630-20-6
22	Dimethylformamide (DMFa)[4]	68-12-2
23	Chlorinated Paraffins[5]	Various
24	Phenol	108-95-2
25	Alkylphenols (APs), Alkylphenol Ethoxylates (APEOs), including all Isomers Nonylphenol (NP), mixed isomers[6] Octylphenol (OP), mixed isomers Nonylphenol ethoxylates (NPEOs)[6] Octylphenol ethoxylates (OPEOs)	Various
26	N-Nitrosamines	Various, refer AFIRM RSL
27	PVC	9002-86-2
28	PFASs (Perfluoroalkyl / Polyfluoroalkyl Substances) (All PFAS defined as fluorinated organic chemicals containing at least one fully fluorinated carbon atom)	Refer Appendix -1 for PFASs (Perfluoroalkyl / Polyfluoroalkyl Substances) list
29	Formaldehyde[7]	50-00-0
30	Bisphenols (BPA, BPB, BPS, BPF, BPAF)[8]	80-05-7; 80-09-1; 77-40-7; 620-92-8; 1478-61-1

FOOTNOTES

1. See Appendices 2 and 3 for a partial list of Azo dyes and pigments which, through reductive cleavage, may form restricted substances (amines).
2. US: New York labeling requirement - Effective from 1 January 2021, it is prohibited to sell or offer for sale of children's jewelry with lead content more than 40 ppm but less than federal standards (90 ppm for surface coating or 100 ppm for substrates) unless it bears a warning label. The warning statement can be either placed on the children's jewelry itself or the label on its immediate container and must at least contain the following language: “WARNING: CONTAINS LEAD. MAY BE HARMFUL IF EATEN OR CHEWED. COMPLIES WITH FEDERAL STANDARDS.”
3. Chromium (Cr)-hexavalent restriction is applicable only for leather. Testing is to be performed after aging [aging condition: 24 hours with 80°C & 10% relative humidity (RH)].
4. This restriction is applicable for artificial leather and footwear accessories only, e.g. – Shoes, Bags, belts, wallets, etc.
5. Including short-chained chlorinated paraffin from C10 to C13 and medium-chained chlorinated paraffin from C14 to C17 where chlorine content is 20% to 70%. The possible application can be fatliquoring (leather), plasticizer, and flame retardant (plastics).
6. LS&Co.'s APEOs requirement in final product - The Allowable trace (TR) limit value for NP and OP – 5mg/kg & for NPEOs and OPEOs – 50 mg/kg
7. LS&Co.'s Formaldehyde requirement in final product – For Children: Not detected (TR-16mg/kg), Adults -TR-65 mg/kg. EXCEPTION: For baby products (age 0 – 24 months) intended for the Japanese market, the formaldehyde concentration must be below an absorbency (A-A) limit of 0.05 using JIS L1041-2011 Method A.
8. LS&Co.'s Bisphenols requirement in final product - The Allowable trace (TR) limit value for BPA - 1 mg/kg, BPB, BPS, BPF & BPAF - 10 mg/kg.
9. Test method for triclosan: Solvent extraction and analyzed by gas chromatography-mass spectrometry (GC-MS).



SECTION – 3

LS&Co. RSL EXPECTATIONS AND BEST PRACTICE FOR CHEMICAL COMPLIANCE

LS&Co. RSL EXPECTATIONS AND BEST PRACTICE FOR CHEMICAL COMPLIANCE

LS&Co. requires that all "Products, Materials, Chemicals and Other Goods" from Suppliers and Sources comply with:

1. The AFIRM RSL requirements.
2. Additionally, LS&Co. Priority chemicals List and RSL Usage ban policy (Section-2)
3. Emerging chemical issues policy (Appendix -4).
4. Any applicable law of any country and jurisdiction in which the Supplier or Source conducts business and in any jurisdiction in which it ships Materials, Chemicals or Other Goods. In addition, each Supplier is similarly responsible and also liable to LS&Co. for ensuring that each of its Sources similarly complies with this RSL and the aforesaid applicable laws.

Managing chemical compliance for LS&Co. is not just a case of testing products before they go on sale. There is a requirement to put systems in place for managing chemical inputs and manufacturing processes such that there is an expectation that product chemical compliance will be achieved

LS&Co. considers that to ensure chemical compliance the three key areas to manage are:

- Chemical formulations
- Components / Materials (textiles, leather, trims, and so on)
- Production facilities

Certain independent certification schemes can also be used to confirm compliance with one or more of these three key areas and details are provided in Table A & C below.

LS&Co. does not operate a single design, specification, and sourcing model, but there are fundamental steps that must be undertaken to bring any product to market and key pieces of good practice that must be implemented to ensure RSL Complaince.

For any product to be manufactured and put on sale the following steps have to be carried out – depending on the specific model being employed, these steps may be individual or combined and they may be carried out by LS&Co. teams, Suppliers, or Sources.

- Innovation - to develop new materials, new processes, or new product looks or aesthetics
- Product Design and Development with technical Specification - of materials and products
- Sourcing - of chemical formulations, materials, and finished products
- Component Manufacture
- Product Assembly

Advice for ensuring chemical compliance at all stages of the design and buying process is provided in Table B below.

Table A – GUIDE FOR SELECTION OF CHEMICALS, COMPONENTS AND FACILITIES FOR RSL COMPLIANCE

The information in the table below should be used as a guide when selecting or evaluating chemicals, components, and facilities to avoid chemical non-compliance. Specific business processes, standards, and expectations are likely to change over time and readers should always familiarize themselves with current LS&Co. business requirements.

	Not Permitted	Minimum Expectations	Preferred
Substances and Formulations Example:- • Dyes • Pigments • Auxiliaries • Finishing chemicals • Printing inks • Adhesives • Commodity chemicals	• Formulations that contain LS&Co. priority chemicals RSL Usage ban list including Antimicrobials, PFAs (any organic fluorine content) and Flame retardants. • Intentional use of any legally restricted Endocrine disruptors,Skin Sensitizers, CMRs, PBTs, etc. • Formulations that are non-conformant to ZDHC MRSL • Intentional use of Chemicals that are restricted on the AFIRM RSL or ZDHC MRSL ***Higher Risk – Care Advised** • Formulations and processes that are not verified for RSL • Formulations that are not screened or confirmed as MRSL compliant • Formulations from suppliers who cannot provide SDS, TDS, and Compliance Declarations	• LS&Co. Chemical Information Log declaration (CIL) • Material safety data sheets • Technical data sheets • Screened Chemistry certificate, including Commodity Chemicals screening • Comply with LS&Co.Priority chemical policies of RSL usage ban, Emerging issues, Antimicrobials, PFAS, Flame retardants, etc	• Formulations that are known to be RSL compliant and have existing screening information • MRSL conformance certifications • ECO PASSPORT by OEKO-TEX®
Components / Materials Example:- • Textile materials • Leather materials • Metal, non-metal components	**Prohibited materials, processes** • Market materials (from unknown manufacturers or local sources) • PVC • DMFu coated desiccants • PFAS based Durable water repellent (DWR) finishes • PVC Plastisol Printing. ***Higher Risk – Care Advised** • Components or materials that are not verified for RSL • PU leather • Leather (coated / uncoated) • Textiles with a performance finish • Coated textiles • Pigment printed textiles • Trims (metal, plastic, textile) • Man-made leaded crystals	• Do not use any materials that are banned by LS&Co. • Follow LS&Co. RSL test protocols during development and productions per season	**Certifications** • STANDARD 100 by OEKO-TEX® • LEATHER STANDARD by OEKO-TEX® • GOTS for organic • GRS or RCS for recycled • Any other industry certifications, consult with LS&Co. Product safety team before use **Materials and Processes** • Components or Materials that are verified for RSL and have valid test reports and CIL declarations • Water-based coatings • Water-based binders • Water-based PU leather • Canopy viscose with Green shirt ranking • Canopy Lyocell • PFAS-free water repellents • Dope dye

	Not Permitted	Minimum Expectations	Preferred
Material where there is a point of sale claim of specific sustainability attributes e.g. • Organic Materials • Leather materials • Recycled materials	Any material or product without appropriate 3rd party certification	• Follow LS&Co. RSL test protocols during development and productions per season • OCS - Organic Content Standard • GRS Global Recycling Standard (GRS) or Recycled Claim Standard (RCS) Note: Certificates are required to verify all sustainability product claims, consult with LS&Co. PD&S and Sustainability contacts for more details	• MADE IN GREEN by OEKO-TEX® certification • Leather working Group (LWG) certification with a Gold rating
Facilities Example:- • Cut and Sew units • Dyeing mills • Laundries • Printing units • Tanneries	• Facilities that Do not meet LS&Co Sustainability standards criteria. (Refer LS&Co.. Sustainability guidebook). ***Higher Risk – Care Advised** • Facilities that cannot demonstrate competence in chemical management • No 3rd party certifications to demonstrate competence in chemical management • Facilities with historical RSL failures	• Execute annual LS&Co. RSL agreements • Complete online RSL self-assessments • File and provide necessary information downstream as appropriate (full recipe details, SDS, TDS, CIL declarations, appropriate certifications, and test reports	• STeP by OEKO-TEX® • GOTS certified • GRS certified • Verified Higg FEM • LWG Gold rating • Working toward Clean Chain and InCheck inventory reporting with ZDHC MRSL compliant chemistry

Table B – Summary of Requirements with Best Practice to the Buying Process

Innovation	Design	Product Development - Technical Specification	Sourcing	Component Manufacture	Product Assembly (and industrial laundry and printing)
• Execute applicable RSL agreements before business engagement with Suppliers and Sources • Communicate RSL standards to all Suppliers and Sources (as defined in Appendix-7) and chemical suppliers involved in component and product manufacture • Use only chemicals, formulations, components, and facilities that have previously been used and proven to meet RSL standards • Never specify chemicals, formulations, components, or facilities that are not permitted or do not meet minimum RSL requirements • If new formulations, components, or facilities are used, try to use those covered by appropriate 3rd party certifications • If non-certified formulations, components, or facilities are proposed, ensure that appropriate assessments are conducted before use to verify conformance with minimum RSL requirements • Ensure all information on facilities, materials, chemical recipes, processes, formulations, certifications, and test reports is recorded and kept on file • Ensure that any products whose attributes are to be promoted as at the point of sale have the appropriate certifications to verify marketing claims					
Ensure all materials and chemical inputs meet LS&Co. RSL requirements before trials commence.	• Specify known, RSL compliant components, processes, and formulations as much as possible • Highlight the need for chemical compliance on all designs/tech packs • Test materials as per RSL testing guide • Consult with LS&Co. product safety team as needed	Use previously used RSL compliant facilities where possible Communicate detailed requirements for new, proposed facilities and ensure they're understood on RSL obligations before proceeding Consult with LS& Co. Product safety team for factory training needs and RSL downloads	Ensure the availability of full recipe details, SDS, TDS, CIL declarations, appropriate certifications, and test reports at every stage of product development and manufacture	• Ensure all components are RSL tested and in compliance before assembly • Ensure all components and formulations used in assembly are RSL compliant • Ensure all formulations used in laundry and printing processes are RSL compliant	

DECISION TREE FOR THE SELECTION OF COMPONENTS AND FACILITIES FOR RSL COMPLIANCE

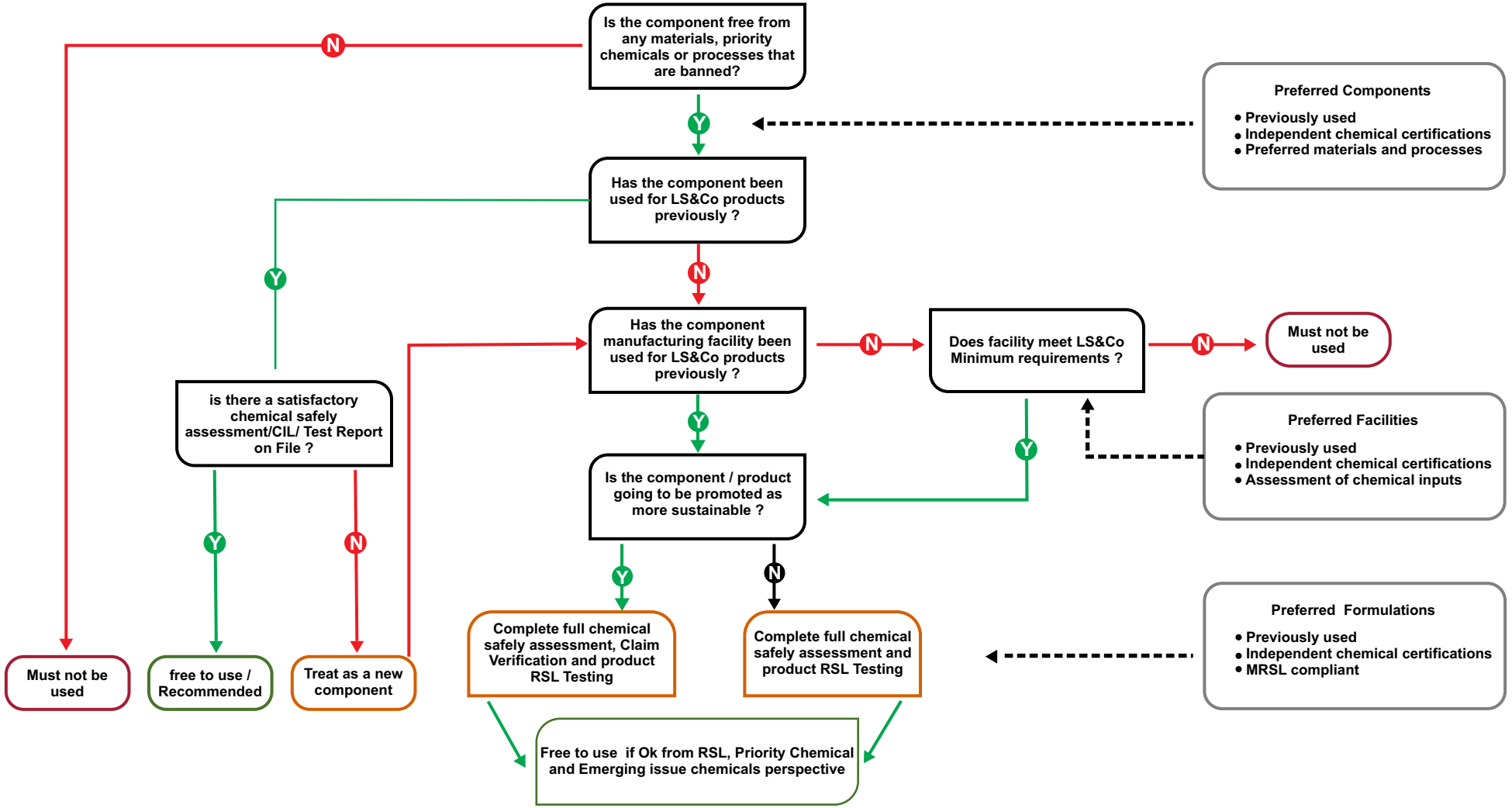


Table C – Schemes/Certifications

Scheme/ Certification	Main Focus	LS&Co. Risk Mitigation	Comments
Screened Chemistry	Hazard Assessment methodology for full formulation review	Chemical hazard assessment performed by authorized 3rd party toxicology organization. Contact LS&Co. Sustainability team for more details	Requires Screened Chemistry certificate and is an approved ZDHC MRSL conformance program.
ZDHC MRSL	Chemical Inputs / Formulations	MRSL conformance certifications	Multiple levels 1 -3 with 1 being a verification test, 2 being a test and review of a chemical manufacturer's operating practices, and 3 requiring an on-site visit
ZDHC InCheck report	Facility Inventory	-	100% of chemical inventory to be MRSL compliant
ECO PASSPORT by OEKO-TEX®	Inputs / Chemical Formulations	Certified formulations lower risk of RSL failure for textiles/leather/components	ECO PASSPORT by OEKO-TEX® limits are protective of STANDARD 100 limits on textiles/leather/components and align with ZDHC
STeP by OEKO-TEX®	Facility assessment including chemical management (including inventories), environmental management/performance (including effluent), health and safety, social responsibility, and quality management	STeP by OEKO-TEX® facilities are lower risk	MRSL and effluent requirements for STeP by OEKO-TEX® are closely aligned with ZDHC

Scheme/ Certification	Main Focus	LS&Co. Risk Mitigation	Comments
Higg FEM	Includes a chemical evaluation module for which there is a score	Independently verified FEM chemical module scores indicate low risk in terms of RSL failure	Self-reported scores have limited value
GRS (Global Recycling Standard)	Product RSL	GRS certified products are very low risk	GRS is primarily a materials management/chain of custody certification but requires compliance with an RSL
GOTS (Global Organic Textile Standards)	Product RSL	GOTS certified products are very low risk	GOTS also has requirements for chemical inputs and other expectations of the facilities – such as effluent treatment
STANDARD 100 by OEKO-TEX®	Product and component RSL compliance and certification	Very low risk of STANDARD 100 by OEKO-TEX® certified products/textiles/components having an RSL failure	STANDARD 100 by OEKO-TEX® certificates are traceable, require testing, auditing of inventories and managements systems
LEATHER STANDARD by OEKO-TEX®	Product and leather RSL compliance and certification	Very low risk of LEATHER STANDARD by OEKO-TEX® certified products/leather having an RSL failure	LEATHER STANDARD by OEKO-TEX® certificates are traceable, require testing, auditing of inventories and managements systems
MADE IN GREEN by OEKO-TEX®	Product and component certification that combines STANDARD 100 by OEKO-TEX® and STeP by OEKO-TEX®	Strongly encouraged by LS&Co.	MADE IN GREEN by OEKO-TEX® provides traceable messaging to consumers that the product has been tested for harmful substances, made in environmentally friendly facilities, and produced in safer and socially responsible workplaces
ZDHC ClearStream report	Effluent Output for a facility		An indication that no restricted substances are present in waste streams
LWG (Leather Working Group)	Facility assessment for tanneries and leather finishing that includes chemical management	Recommended that 'Gold rated' tanneries are used as these indicate low risk in terms of RSL failure	LWG operates gold, silver, and bronze rating for the better tanneries

SECTION – 4

MATERIALS AND PROCESSES – SPECIFIC RISKS AND MITIGATION

MATERIALS AND PROCESSES – SPECIFIC RISKS AND MITIGATION

This section considers common material types, common processes types, and the chemical risks associated with them. It also considers what can be done to mitigate risks and alternative materials, and processes that can be specified to reduce RSL risks further.

The aim is to provide information that enables a greater understanding of higher and lower risk materials and processes and information to those using chemicals on how to avoid RSL failure.

The following 3 tables give a general overview of components used in the production of LS&Co. products. More details on specific materials, processes, and specific risks and mitigation are provided later in this section. Any single component can cause a product failure. All failures have to be treated with equal importance.

Table A – General overview of components used in the production of LS&Co. products

Clothing	e.g. Shirts, Trousers, Underwear, Coats, Denim, Knits and Sweaters, Leather garments
Main Materials	e.g. Textiles (dyed, printed, finished, coated), Leather (dyed, printed, coated), Mock Leather, Recycled Textiles and Leather
'Main' Materials used as Trims	e.g. Threads, Pocketing, Woven Lining, Knit Lining, Labels, Badges and Patches, Care Labels, Tapes, Stretch Inserts, Adjustable Waistbands, Laces, Drawstrings, Interlinings, Elastics, Embroidery
Non-Metal/Plastic Trims	e.g. Buttons, Buckles, Decorative Studs, D-Rings, Eyelets/Grommets, Toggles, Tipping / Aglets
Metal Trims	e.g. Buttons, Snaps, Rivets, Buckles, Hook and Bar, Studs, Eyelets/Grommets, Toggles, Aglets, D-Rings, Tipping
Other / Multiple Materials	e.g. Zippers, Sew-on Crystals, Rhinestones, Sequins, Beads, Stickers, Heat Transfer Embellishments, Foams, Tapes, Visible Trims such as Stretch Inserts, Maternity Panels, Hook & Loop Fasteners, PolyFills used in Jackets

Footwear	e.g. Shoes, Sneakers, Boots, Sandals
Upper Materials	e.g. Natural/Synthetic Leather (dyed, coated, printed), Textiles (dyed, printed, coated, finished), Plastics, PU leather, and Recycled leather
Lining / Sock Materials	e.g. Leather, Textiles
Soles	e.g. TPU, PU, EVA, Rubber, ABS, Leather
'Main' Materials used as Trims	e.g. Threads, Woven Lining, Knit Lining, Labels, Badges and Patches, Care Labels, Tapes, Laces, Interlinings, Elastics, Embroidery, Zippers
Metal Trims	e.g. Eyelets, Aglets
Plastic Trims	e.g Eyelets, Aglets, Motifs
Other	e.g Foams, Glue, Adhesives and Desiccants

Accessories	e.g. Belts, Suspenders, Backpacks, Wallets, Caps, Eye Wear Products, Tote, Duffle and Handbags, Bandanas, Gloves, Scarf, Mugs, Watches, (Electrical: Batteries, Portable Chargers, Power Banks, Bluetooth devices)
Main Materials	e.g. Leather (dyed, coated, printed), Textiles (dyed, printed, coated, finished), Plastics, PU leather, Ceramics
'Main' Materials used as Trims	e.g. Threads, Woven Lining, Knit Lining, Labels, Badges and Patches, Care Labels, Tapes, Laces, Drawstrings, Interlinings
Plastic Trims	e.g. Buttons, Buckles, Decorative Studs, D-rings, Eyelets/Grommets, Toggles, Tipping / Aglets
Metal Trims	e.g. Buttons, Snaps, Rivets, Buckles, Hook and Bar, Studs, Eyelets/Grommets, Toggles, Aglets
Other	Foams
Electrical/ Electronics	Batteries, portable chargers, power banks, Bluetooth devices

Additionally, packaging has to be considered including the following items:

Packaging	E.g. Hang Tags, Flashers, UVM Stickers, Boxes / Cartons, Labels, Adhesives, Tapes, Poly Bags, etc.,

Table B – Chemical Risks Associated with Specific Material Types

The table below lists materials that are commonly used in LS&Co. Products and the most common chemical risks.

The list is not exhaustive and does not include chemicals that are very unlikely to be used (deliberately or inadvertently) or detected.

When considering a component, it is impossible to fully disassociate materials and processes (e.g., PU mock leather can be considered as a material in its own right or as a textile with a thick coating applied). Base materials have very limited chemical risks. It is generally the chemicals that are placed on them or within them that are of concern.

The materials listed in the table below are 'standard' materials without any special finishes, processes or techniques applied. To assess the risks of blends it is necessary to consider multiple rows.

This table should be read in conjunction with the process risk table (later in this section) which provides details of the chemical risks associated with processes.

The AFIRM RSL also provides details on specific risks and testing requirements.

Material	Specific Type	Most Common Failures
Dyed Textiles Dyed with standard dyes, no performance finishes applied	Applies to all fiber types	• APEOs from process chemicals such as detergents, wetting agents, etc. • AZO AMINES from dyestuffs (darker colors higher risk – whites no risk)
	+Viscose	• FORMALDEHYDE (from undeclared Anti-pill or shrink-proof finish)
	+Polyester	• ALLERGENIC DISPERSE DYES (dark colors are higher risk – whites no risk)
	+Nylon / Silk	• EXTRACTABLE HEAVY METALS (from Metal-complex dyestuff)
	+Wool	• CHROME VI in rare instances where old generation 'after chrome' dyes are used • EXTRACTABLE HEAVY METALS (from Metal-complex dyestuff)
	Recovered Fibers mechanically recovered from pre-or post-consumer waste e.g. Cotton / Wool	• Same risks as virgin fibers
	Recycled Fibers fiber recovered via depolymerization / re-polymerization, melting, or dissolution before fiber extrusion e.g. Polyester / Nylon / Lyocell	• Same risks as virgin fibers
Denim Dyed with indigo dye and bleached/ washed	Cotton / Lyocell / Hemp	• APEOs from Process chemicals such as detergents, wetting agents, etc • RESIDUAL CHLORINE / OZONE creating odor

Material	Specific Type	Most Common Failures
Metal Yarns		• NICKEL from metals/alloys • LEAD from metals/alloys • CADMIUM from metals/alloys
Metallised Yarns (e.g. Lurex)		• PVC from films • PHTHALATES from films
Leather	Dyed,**Uncoated**	• CHROME VI formed from chrome salts used in tanning • APEOs from process chemicals such as detergents, degreasing agents,etc • AZO AMINES from dyestuffs (darker colors higher risk) • CHLORINATED PARAFFINS from processing • OPP used as a preservative • ISOTHIAZOLINONE as a preservative
	Coated	• Same risks as dyed leather • Plus risks associated with coatings - See process table below
	Recycled from process waste, composite of shredded discarded leather	• Same risks as dyed leather • APEOs
PU Mock Leather		THIS IS A COATED TEXTILE BUT EXISTS AS A MATERIAL Textile: • APEOs from process chemicals such as detergents, wetting agents, dispersing agents, etc • AZO AMINES from dyestuffs (dark fabric colors are higher risk) Coating: • ALLERGENIC DISPERSE DYES for the polyester base (dark colors are higher risk) • APEOs from chemicals coating formulation • AZO AMINES from pigments • DMFa from solvent-based PU coating • PVC (it is banned by LS&Co. but could be used or present as a contaminant) • PHTHALATES if PVC /PU is used or present as a contaminant • LEAD and CADMIUM in pigments or polymer stabilizers

Material	Specific Type	Most Common Failures
Plastics / Polymers e.g. Used as plastics, coatings, films	All polymer types	• LEAD and CADMIUM in pigments
	PU / TPU	• ISOCYANATES • Phthalates • Organotins • DMFa from Solvent-based PU coating
	ABS	• Organotins • STYRENE MONOMER
	EVA	• The odor from Formamide, Acetophenone, and 2-Phenyl-2-Propanol • Phthalates • Organotins
	Polycarbonate	• Organotins • BISPHENOL A
Rubber		• LEAD and CADMIUM in pigments • Phthalates • Organotins • Poly Aromatic Hydrocarbons (PAHs) • Chlorinated paraffins (SCCP & MCCP)
Metal		• LEAD • CADMIUM • NICKEL (release)
Elastics		• Same risks as Nylon / Elastane fabrics • APEOs from process chemicals such as detergents, wetting agents etc • AZO AMINES from dyestuffs (darker colors higher risk – whites no risk) • EXTRACTABLE HEAVY METALS (from metal-complex dyestuff)
Foams		• The risk depends on polymer type – see Plastics / Polymers
Polyfills		• APEOs • Dye related risks – if dyed
Packaging		• See AFIRM Packaging RSL

Table C – Chemical Risks Associated with Specific Processes

The table below contains details of processes that are commonly applied to components and products to create LS&Co. designs and their possible chemical failures. Detailed information on avoidance of failure is provided after this table.

Dyeing			
Process / Dye Type	**Fiber Type**	**Substrate Type**	**Possible Chemical Failures / Issues**
Reactive	Cotton Linen Viscose Hemp	Fibers Yarns Fabrics Garments	▪ AZO AMINES – from old generation azo dyes ▪ APEOs from process chemicals such as detergents, wetting agents, etc.
Vat/ Sulphur	Cotton Linen Viscose Hemp	Fibers Yarns Fabrics Garments	▪ APEOs from process chemicals such as detergents, wetting agents, etc.
Disperse	Polyester	Fibers Yarns Fabrics	▪ AZO AMINES – from old generation azo dyes ▪ APEOs from process chemicals such as detergents, wetting agents, dispersing agents, etc. ▪ ALLERGENIC DISPERSE DYES – from old generation dyes ▪ CHLORO ORGANIC CARRIERS – where polyester is dyed at low temperatures in open vessels (e.g. laces, trims)
Acid	Nylon Silk	Fibers Yarns Fabrics	▪ AZO AMINES – from old generation azo dyes ▪ APEOs from process chemicals such as detergents, wetting agents, etc. ▪ Tiny risk of 'other harmful dyes' from use of old generation dyes
Acid	Wool	Fibers Yarns Fabrics Garments	▪ AZO AMINES – from old generation azo dyes ▪ APEOs from process chemicals such as detergents, wetting agents, etc. ▪ Tiny risk of 'other harmful dyes' from use of old generation dyes
Basic	Acrylic	Fibers Yarns Garments	▪ AZO AMINES – from old generation azo dyes ▪ APEOs from process chemicals such as detergents, wetting agents, etc.

Process / Dye Type	Fiber Type	Substrate Type	Possible Chemical Failures / Issues
Direct	Cotton Linen Viscose Hemp	Garment	▪ AZO AMINES – from old generation azo dyes ▪ APEOs from process chemicals such as detergents, wetting agents, etc. ▪ Tiny risk of 'other harmful dyes' from use of old generation dyes
Pigment	Any fiber type	Garment	▪ AZO AMINES – from pigments ▪ APEOs – from process chemicals and binder formulations ▪ LEAD AND CADMIUM from pigments ▪ ISOCYANATES from PU binders
Denim (Raw unwashed)	Cotton Lyocell Hemp	Yarns	▪ APEO – from process chemicals such as detergents and wetting agents
Spray Dye	Any fiber using dyes or pigments	Garments	▪ Risks are related to the dye type or pigments used (see previous entries) ▪ Worker exposure to spray must be managed
Tie-Dye	Any fiber, usually: Cotton Nylon	Garments	• Risks related to the dye type (see previous entries)
Dyeing with natural dyes and pigments	Cotton	Fibers Yarns Fabrics Garments	• Risk of Heavy metals from Mordants (dye fixatives) • APEOs from process chemicals such as detergents, wetting agents, etc.

Finishing			
Process	**Fiber Type**	**Substrate Type**	**Possible Chemical Failures / Issues**
Softeners (general)	Any fiber type	Fabrics Garments	• APEOs – from finish formulations
Softeners (silicone)	Any fiber type	Mainly fabrics	• APEOs – used as emulsifying agents and wetting agents in finish formulations • CYCLIC SILICONES (Cyclosiloxanes) can be present (C4, C5, C6)
Durable Water Repellent	Any fiber type	Mainly fabrics	• **PFAS – Any fluorine-containing organic chemicals that are used in the process of manufacturing to impart properties such as water repellency or others to the final products are not allowed to be used in LS&Co. (refer LS&Co. PFAS policy)** • APEOs – used as emulsifying agents and wetting agents in finish formulations
Soil and Stain Repellent	Any fiber type	Mainly fabrics	
Resin (wrinkle-free/easy care)	Typically:CottonLinen	Fabrics Garments	• FORMALDEHYDE – from resins • Plus softener risks and APEOs if resins combined with softeners
Resin (anti-pill)	Viscose	Fabric	• FORMALDEHYDE – from resins • Plus softener risks and APEOs if resins combined with softeners
Resin (handle modification)	Any fiber type	Fabrics Garments	• FORMALDEHYDE – from resins • Plus softener risks and APEO's if resins combined with softeners
Anti-microbial	Any fiber type	Mainly fabrics	• **Any biocide used to impart properties to the final products is not allowed to be used in LS&Co. In case of requested biocide finishing by LS&Co. used biocides have to be approved acc. to EC 528/2012 and approval of LS&Co. product safety is required**
Temperature control	Any fiber type	Fabrics	• APEOs in binder formulations • ISOCYANATES in PU binder formulations

Process	Fiber Type	Substrate Type	Possible Chemical Failures / Issues
Flame Retardants	Any fiber type	Fabrics	• **No Flame Retardants are allowed on LS&Co. products.**
Moisture Wicking	Any fiber type	Fabrics	• APEOs in binder formulations • ISOCYANATES in PU binder formulations
Textile Coating	Any fiber type	Fabrics	• AZO AMINES – from pigments. • APEOs – from coating formulations • LEAD AND CADMIUM from pigments • ISOCYANATES from PU coating • ORGANOTINS from PU coating • PVC and PHTHALATES from PVC coating • SOLVENTS (various chemicals depending on coating type) • **Melamine based resins are a) prohibited for use at coating, and b) require LS&Co. Product safety approval before use as cross-linker**
Leather Coating (general)	Leather		• AZO AMINES – from pigments. • APEOs – from coating formulations • LEAD AND CADMIUM from pigments • PVC and PHTHALATES from PVC binders • SOLVENTS
Leather Coating (PU)	Leather		• General risks plus: • ISOCYANATES from PU binders. Use of blocked diisocyanates (oxime/pyrazole- or self-blocked) based on any other diisocyanates and pre-polymers (then listed) on the garment/fabric finishes and/or prints needs prior approval from LS&Co. Product safety • ORGANOTINS from PU coating • N, N Dimethylformamide from PU binders

Process	Fiber Type	Substrate Type	Possible Chemical Failures / Issues
Leather Coating (Wax)	Leather		• General leather risks plus: • APEOs • Chlorinated paraffin • Glycols • Phthalates
Leather Coating (Acrylic Top)	Leather		• General leather risks plus: • Glycols • Phthalates
Leather Coating (PU)	Leather		• General leather risks plus: • Organotins • Diisocyanates • Phthalates
Leather Coating (Nitrocellulose)	Leather		• General leather risks plus: • APEOs • Glycols • Phthalates

Laundry and Denim Finishing		
Process	**Substrate type**	**Possible Chemical Failures / Issues**
Denim Wash / Bleach	Denim Garments	• RESIDUAL ODOUR from chlorine bleach • APEOs from process chemicals such as detergents, wetting agents, and softeners
Softener wash	Dyed Garments – Any fiber type	• APEOs from process chemicals such as detergents, wetting agents, and softeners
PP Spray	Denim Garments	• Worker exposure to spray must be managed via PPE and water curtains
Sandblasting	Denim Garments	• NOT PERMITTED
3D Resin	Denim Garments	• FORMALDEHYDE from resins
Hand scraping	Denim Garments	• Worker exposure to dust must be managed
Laser Etching	Denim Garments	• Worker exposure to fumes must be managed • Safety interlocks must be operational to prevent laser burns
Dipping and Sponging localized bleaching	Denim Garments	• Risks depend on chemicals used (PP or chlorine)
Ozone Treatment	Denim Garments	• Residual OZONE odor • APEOs from process chemicals such as detergents, wetting agents, and softeners

Printing			
Process	**Fiber Type**	**Substrate Type**	**Possible Chemical Failures / Issues**
Reactive (Screen and digital)	Cotton Linen Viscose Hemp	Fabric AOP	• AZO AMINES – from old generation dyes • APEOs from process chemicals such as detergents, wetting agents, etc • Antimicrobials (various) from print pastes
Disperse (Screen and Sublimation)	Polyester	Fabric AOP	• AZO AMINES – from old generation dyes • APEOs from process chemicals such as detergents, wetting agents, etc. • ALLERGENIC DISPERSE DYES – from old generation dyes • Tiny risk of 'other harmful dyes' from use of old generation dyes • Antimicrobials (various) from print pastes
Acid (Screen and digital)	Nylon Wool	Fabric AOP Garment	• AZO AMINES – from old generation dyes • APEOs from process chemicals such as detergents, wetting agents, etc. • Tiny risk of ' other harmful dyes' from use of old generation dyes • Antimicrobials (various) from print pastes
Pigment (Screen and digital)	Any fiber type	Fabric AOP Panel Garment	• AZO AMINES – from pigments • APEOs – from print formulations • LEAD AND CADMIUM from pigments • ISOCYANATES from PU binders • PVC and PHTHALATES from PVC binders • SOLVENTS • FORMALDEHYDE from binders • ORGANOTINS from PVC and PU binders • N, N Dimethylformamide from PU binders

Process	Fiber Type	Substrate Type	Possible Chemical Failures / Issues
Plastisol (Screen)	Any fiber type	Panel Garment Footwear Accessories	• Plastisol inks are prohibited in LS&Co. Products. All non-PVC inks must be phthalates and PVC-free • AZO AMINES – from pigments • APEOs – from print formulations • LEAD AND CADMIUM from pigments • ISOCYANATES from PU binders • PVC and PHTHALATES from PVC binders • SOLVENTS • Organotin from PVC and PU binders
Pigment discharge (screen)	Cotton Viscose	Fabric AOP Panel	• AZO AMINES – from pigments • APEOs – from printing formulations • LEAD AND CADMIUM from pigments • ISOCYANATES from PU binders • PVC and PHTHALATES from PVC binders • SOLVENTS • FORMALDEHYDE from binders or reducing agents
Sublimation (digitally printed papers)	Polyester	Fabric AOP Panel	• AZO AMINES from old generation dyes (low risk if transfer papers are inkjet printed)
Reflective (Screen)	Any fiber type	Panel Garment Footwear Accessories	• AZO AMINES – from pigments • APEOs – from printing formulations • LEAD AND CADMIUM from pigments • ISOCYANATES from PU binders • PVC and PHTHALATES from PVC binders • SOLVENTS • FORMALDEHYDE from binders
Beads (Screen – beads applied to adhesive print)	Any fiber type	Panel Garment Footwear Accessories	• AZO AMINES – from pigments • APEOs – from process chemicals • LEAD AND CADMIUM from pigments • ISOCYANATES from PU binders • PVC and PHTHALATES from PVC binders • SOLVENTS • FORMALDEHYDE from binders

Process	Fiber Type	Substrate Type	Possible Chemical Failures / Issues
Glitter (Screen – 'glitter-in-ink' or glitter sprinkled onto printed adhesive)	Any fiber type	Fabric AOP Panel Garment	• ISOCYANATES from PU binders • APEOs – from print formulations • PVC and PHTHALATES from PVC binders • SOLVENTS for binders • SOLVENTS from adhesives • Organotin from PVC and PU binders
Puff (Screen)	Any fiber type	Panel Garment Footwear Accessories	• AZO AMINES – from pigments • APEO – from print formulations • LEAD AND CADMIUM from pigments • ISOCYANATES from PU binders • PVC and PHTHALATES from PVC binders • SOLVENTS • ORGANOTINS from PVC and PU binders
Foil (Screen – foil applied to the printed adhesive)	Any fiber type	Fabric AOP Panel Garment Footwear Accessories	• PVC and PHTHALATES from foil 'films' • SOLVENTS from adhesives • ISOCYANATES in PU adhesives • FORMALDEHYDE in adhesives • ORGANOTINS from PVC and PU binders
Flock (Screen – 'flock-in-ink' or more commonly sprinkled onto printed adhesive)	Any fiber type	Fabric AOP Panel Garment Footwear Accessories	• AZO amines in flock fiber • APEOs on flock fibers (from upstream dyeing) • SOLVENTS from adhesives • ISOCYANATES in PU adhesives • FORMALDEHYDE in adhesives
Heat transfer pre-printed films	Any fiber type	Panel Garment Footwear Accessories	• PVC and PHTHALATES • LEAD and CADMIUM from pigments • AZO AMINES from pigments • Organotin from PVC

Process	Fiber Type	Substrate Type	Possible Chemical Failures / Issues
Printing – Photo printing (CMYK) (Screen)	Any fiber type (mainly cotton)	Panel Garment	• AZO AMINES – from pigments • APEOs – from print formulations • LEAD AND CADMIUM from pigments • ISOCYANATES from PU binders • PVC and PHTHALATES from PVC binders • SOLVENTS • FORMALDEHYDE from binders
Glow in the dark	Any fiber type (mainly cotton)	Panel Garment Footwear Accessories	▪ AZO AMINES – from pigments ▪ APEOs – from binder formulations ▪ LEAD AND CADMIUM from pigments ▪ ISOCYANATES from PU binders ▪ PVC and PHTHALATES from PVC binders ▪ SOLVENTS ▪ FORMALDEHYDE from binders
Gel	Any fiber type		▪ AZO AMINES – from pigments ▪ APEOs – from print formulations ▪ LEAD AND CADMIUM from pigments
Silicone Ink	Any fiber type	Panel Garment Footwear Accessories	▪ AZO AMINES – from pigments ▪ APEOs – from binder formulations ▪ LEAD AND CADMIUM from pigments

Leather Processing	
Process	**Possible Chemical Failures/Issues**
Chrome Tanning	▪ CHROME VI formed via oxidation of Chrome III salts used in tanning ▪ AZO amines from old generation dyes ▪ SCCPs used as softeners ▪ OPP as a preservative (permitted but restricted) ▪ APEOs from process chemicals such as degreasing agents,detergents, etc
Veg Tanning	▪ AZO amines from old generation dyes ▪ SCCPs used as softeners ▪ OPP as a preservative (permitted but restricted) ▪ APEOs from process chemicals such as degreasing agents,detergents, etc.
Leather Coating (general)	▪ AZO AMINES – from pigments ▪ APEOs – from coating formulations ▪ LEAD AND CADMIUM from pigments ▪ PVC and PHTHALATES from PVC binders ▪ SOLVENTS
Leather Coating (PU)	▪ General risks plus: ▪ ISOCYANATES from PU binders. Use of blocked diisocyanates (oxime/pyrazole- or self-blocked) based on any other diisocyanates and pre-polymers (than listed) on the garment/fabric finishes and/or prints needs prior approval from LS&Co. ▪ ORGANOTINS from PU coating ▪ N, N Dimethylformamide from PU binders
Leather Finishing (waxes, creams, polish)	▪ Chlorinated paraffin from wax finish Aniline leather (dyed followed by thin protective coating PU/Silicone), Coated leather [coating thickness more than 0.15 mm-PU Coating], Metallic Coated leather [metal emulsion applied onto the leather for shiny appearance], Nubuck leather (surface is abraded to give soft, velvet-like feel], Oil leather [leather surface treated with oil/wax emulsion], Patent leather [high gloss surface finish imparted generally using linseed oil], Pigmented leather [leather surface contain coating for pigment], Suede leather [surface is sanded to give leather velvet-like feel]
Synthetic tanning agents	In the leather industry, Bisphenol F can be an impurity in synthetic tanning agents. Bisphenol S is a monomer that is used to manufacture synthetic agents, which can lead to residues in the final product. The bisphenol content in leather might come from the synthetic tanning agents used. Suppliers/tanneries are recommended to test the tanning agent before used (e.g. by ISO 21135). However, there are bisphenol-free tanning agents available in the market (e.g. offered by Zschimmer & Schwarz).

Avoiding Failures – Generic

Some steps can be taken by a designer and product developers in terms of creating products with lower risk materials and processes and the designer and product developers should try to ensure that higher-risk components are sourced from lower risk component manufacturers

However, the key to avoiding RSL failures is good chemical management practice in the component manufacturing facility, including:

- A full written chemical inventory
- Chemicals sourced from reputable chemical suppliers
- The use of ZDHC MRSL compliant chemicals
- LS&Co. Screened Chemistry program compliant formulations
- SDS for all chemicals and formulations, providing an indication of all hazardous chemicals above certain limits
- Technical data sheets for all chemicals and formulations, providing details of how they should be used – minimizing chances of inadvertent formation of unwanted chemicals and/or incomplete reactions
- CIL Declarations of conformance from chemical suppliers
- Details of MRSL compliance and/or independent certifications where appropriate
- Full written recipes with details of all formulations and commodity chemicals
- Standard Operating Procedures for all processes
- RSL Failure analysis protocols
- Independent certifications to demonstrate competence in chemical management
- Spot checks on incoming formulations for RSL/MRSL compliance
- Spot checks on incoming raw materials for RSL compliance
- RSL checks on finished products
- CIL created for all formulations used in the manufacture of a component

Table D – Avoiding Failure/Corrective Action – Chemical Specific

The table below gives details of where commonly detected restricted substances may be found and how they can be avoided.

This table is predominantly of use for failure analysis and corrective actions plans

Chemical	Where the chemical/s can be found	How it can be avoided?
Allergenic Disperse Dyes	A small number of disperse dyes for dyeing polyester are categorized as allergenic/skin sensitizing	• Working with reputable dye suppliers • Working with formulations that are ZDHC MRSL Compliant • Review CIL and TDS of dyestuff and check with skin sensitizer database
Anti-microbials	These are deliberately applied to give consumer benefits such as anti-odor (e.g. silver compounds, quaternized silicones). They can be used as preservatives for greige to protect it from mold during storage and transportation (e.g. Penta or tetra-chlorophenol). They can be legitimately used to preserve formulations (various approved chemical types)	• Any biocide used to impart properties to the final products is not allowed to be used without prior approval of LS&Co. • In case of requested biocide finishing by LS&Co. used biocides have to be approved acc. to EC 528/2012 and approval of LS&Co. Product safety team. • Do not use them intentionally! Check incoming greige for traces of preservatives
APEOs	APEOs are chemicals that are used as detergents, wetting agents, and emulsifying agents. They can be used in 100% form as detergents or at lower levels in multiple types of formulation such as dispersing agents, softeners, coatings, dyebath lubricants, and degreasing agents. APEOs can remain on a substrate after processing or partial processing	• Working with reputable dye suppliers • Working with formulations that are ZDHC MRSL Compliant • Check incoming greige and partially treated substrates (e.g. P4P fabrics)
Azo Amines	Many azo dyes can split to form carcinogenic amines. These tend to be older generation dyes but cover reactive, direct, acid, and disperse dye types so all fiber types can be affected. Denim is not affected unless overdyed with direct dyes. 3,3'– dichlorobenzene has been reported to be found when printing using a combination of Pigment Black 7 with either Pigment Orange 13 or Pigment Orange 34. This combination of pigments shall be subjected to the listed usage bans.	• Working with reputable dye suppliers • Working with formulations that are ZDHC MRSL Compliant

Chemical	Where the chemical/s can be found	How it can be avoided?
Chloro organic Carriers	Chemicals used to dye polyester at room temperature. Normally polyester is dyed at 130°C but it is sometimes dyed in open vessels at lower temperatures using these carriers.	• Only use suppliers with high temperature, pressurized machinery
Chrome VI	Chrome III salts are used for leather tanning but if conditions are wrong they can convert to Chrome VI for which is toxic, sensitizing, and carcinogenic. Chrome VI is very rarely used to fix dyeing on wool in a process called after-fixing.	• Chrome-free tanning can be employed • Managing total extractable chromium is advised as this can convert to Chrome VI – not the chromium involved in cross-linking the leather • Ensuring the pH is managed within recommended limits can help
Cyclic Silicones	Present in some silicone softeners and coatings	• Working with reputable chemical suppliers who can give credible declarations • Not yet on ZDHC MRSL but likely to be on the next revision
Flame Retardants	Flame retardants are deliberately added as a finish to reduce flammability.	• Do not specify them! They are expensive and will rarely be applied to provide something for free
Formaldehyde	Formaldehyde can be present in shrink-proof, easy-care, or anti-pill resins that are applied to cotton, linen, or viscose fabrics. It can be present in old-generation pigment print binders and coating formulations. It can be present in adhesives and impregnated fusings/interlinings.	• Use formaldehyde-free alternatives where possible – where adequate performance can be consistently achieved • Where formaldehyde containing formulations have to be used to give adequate performance ensure curing conditions are correct (pH, time, temperature) • Consider washing products to remove formaldehyde – it is readily soluble
Heavy metals (various)	See separate listings for Lead, Cadmium, and Nickel. Heavy metals can be an integral part of some dyestuffs to provide colorfastness performance – but extractable amounts are low since the metals are bound in. Heavy metals can be used as mordants/fixatives for natural dyes.	

Chemical	Where the chemical/s can be found	How it can be avoided?
Isocyanates	Isocyanates (or more correctly diisocyanates) are one of the building blocks of polyurethane and, if they are not fully reacted, can be present in PU binders, adhesives, and coatings.	• Use pre-polymerized PU where possible and avoid 2-pack products that have high levels of isocyanate present • Where 2-pack products are used ensure curing conditions are closely controlled (isocyanate:diol ratio, pH, catalyst level, time, temperature)
Lead	Lead can be found in metals components. Lead-based pigments can be used in any end-use that involves pigmentation (printing, coating, plastics, rubber). Lead compounds can be used as a stabilizer for some polymers.	• Working with reputable pigment suppliers • Working with formulations that are ZDHC MRSL Compliant • Checking metal components with ZRF / RSL testing • Use of STANDARD 100 by OEKO-TEX® approved metal and plastic trims
Cadmium	Cadmium can be found in metals components Cadmium based pigments can be used in any end-use that involves pigmentation (printing, coating, plastics, rubber)	• Working with reputable pigment suppliers • Working with formulations that are ZDHC MRSL Compliant • Checking metal components with ZRF / RSL testing • Use of STANDARD 100 by OEKO-TEX® approved metal and plastic trims
Nickel (releasable)	Nickel can be found in metal components Nickel is an integral part of some dye chromophores.	• Working with reputable dye suppliers • Working with formulations that are ZDHC MRSL Compliant Use of STANDARD 100 by OEKO-TEX® approved metal trims
Ortho-phenylphenol (OPP)	OPP is used as a preservative for leather.	• Monitor levels in finished leather • Use LWG medal rated tanneries • Working with reputable leather chemical suppliers • Working with formulations that are ZDHC MRSL Compliant
Organotins	Organotins are occasionally used as an antimicrobial for the preservation of greige. They may also occasionally be used to preserve formulations. Organotins are also used for in-situ catalysis of PU coatings (e.g. rubberized coating of buttons and toggles).	• Working with reputable chemical suppliers • Working with formulations that are ZDHC MRSL Compliant • Avoid the use of 2-pack in-situ polymerization of PU • Conduct RSL checks on incoming greige

Chemical	Where the chemical/s can be found	How it can be avoided?
PFAS	Used in durable water and stain repellent finishes	• LS&Co.'s PFASs (Perfluoroalkyl / Polyfluoroalkyl Substances) elimination policy: LS&Co.'s goal is to phase out the use of any PFASs in the manufacture and packaging of all of its labeled and distributed products. The new and more restrictive limits set in the RSL are intended as one of the steps directed towards that goal. Any fluorine-containing organic chemicals that are used in the process of manufacturing or packaging of LS&Co. labeled or distributed products to impart properties such as water repellency or others to the final products are not allowed to be used without prior approval of LS&Co. • Do not specify PFAS chemistries! • Working with reputable chemical suppliers for PFAS free formulations such as PU, Silicone, Dendrimer-based repellent chemistries • Working with formulations that are ZDHC MRSL Compliant with a further declaration regarding the absence of ALL PFAS
Phthalates	Phthalates are used to soften PVC plastics, films, and binders. They are mobile (not chemically attached) and used at up to 30% by weight so there is a chance of contamination in facilities that manufacture PVC and non-PVC products – and purportedly Phthalate-free and Phthalate containing products.	• Working with reputable chemical suppliers • Working with formulations that are ZDHC MRSL Compliant • Specify PVC-free and phthalate-free and try to work with facilities that use neither PVC nor phthalates to minimize the chance of contamination
Poly Vinyl Chloride (PVC)	PVC is a polymer used in plastics, films, binders, and coatings. The main concerns are with phthalates rather than PVC itself.	• PVCs and their Vinyl chloride monomers use are banned in LS&Co. products • Working with reputable chemical suppliers for PVC free alternatives • Working with formulations that are ZDHC MRSL Compliant • Specify PVC-free and Phthalate-free and try to work with facilities that use neither PVC nor phthalates to minimize the chance of contamination
Chlorinated Paraffins Short and Medium chain Chlorinated paraffins (SCCP's & MCCP's)	SCCPs and MCCPs are alternatives to phthalates and can be used in PVC to promote 'phthalate-free even though SSCPs are illegal! SCCPs and MCCPs are also used as softeners, flame retardants or as fat-liquoring agents in leather processing.	• Working with reputable chemical suppliers • Working with formulations that are ZDHC MRSL Compliant

N,N-Dimethylformamide (DMFa)	Used as the solvent for PU leather. It is washed out during processing but residues remain.	• Specify water-based PU leather where possible
Solvents (various)	Solvents are used in many different processes and formulations (printing inks, coatings, binders, cleaning products). Nowadays water-based alternatives are available for many processes but introduction can be challenging because of different drying characteristics (too quick or too slow depending on the solvent they are replacing). Some solvents have very poor hazard profiles (e.g. CMR) and others are problematic because their volatility creates high levels in working areas that can exceed maximum exposure limits or create fire/explosion risks. VOCs can create environmental issues if not contained. Solvents are not commonly a product safety issue because they often evaporate or are forcibly evaporated during a drying/curing process but they have to be managed for worker safety and environmental protection.	• Working with reputable chemical supplier • Obtain declarations of solvent content (Solvents are not yet fully included on MRSL) • Specify water-based alternatives where possible

SECTION – 5

ROOT CAUSE ANALYSIS (RCA) AND CORRECTIVE ACTION PLANS (CAP)

ROOT CAUSE ANALYSIS (RCA) AND CORRECTIVE ACTION PLANS (CAP)

LS&Co. aims to achieve 100% product compliance against RSL standards and use safer chemistries in productions. It is very important that factories learn from failures rather than simply remediating or replacing items and moving on. There will always be a reason for the failure and analysis enables future failures to be avoided.

The fundamental cause of an RSL failure is highly likely to be:

- Deliberate use of a restricted substance in a chemical formulation
- Presence as a contaminant in a formulation or commodity chemical
- Cross-contamination in a factory or laboratory
- Formation of a restricted substance during a chemical reaction as part of the manufacturing process
- Chemicals sourced from deceptive sources (off the shelves from the local suppliers)
- The factory is compromising chemical quality in the name of cost savings

Ensuring 'contributing factors' are managed well vastly reduces the chances of failure.

The following sequence of questions should be followed to establish causes of failure, contributing factors, and what can be done to ensure future production of components and final products are RSL compliant.

	Notes	RCA / CAP
Is the test report valid?	• Is the lab LS&Co. accredited? • Has the correct test method been employed? • Is the reporting limit and limit of detection/quantification correct? • Have the pass/fail limits been applied correctly?	• Re-test using correct methods in an accredited lab
Do two or more different material types in the same product have the same failure?	• This could indicate the offending chemical has been applied after the product has been assembled e.g. a laundry wash or polish applied to footwear	• Ensure all components comply with LS&Co. standards • Check all SDS, technical information / CIL declarations to look for obvious sources • Speak to chemical suppliers to ask if failing chemical could be present in their formulation • Test formulations for the failing chemical • Replace the failing formulation with a compliant one

	Notes	RCA / CAP
Is the failure on a metal component?	• No remedial action is possible by the assembly factory	• Replace the component with a compliant one • Manufacturers need to reformulate alloys / modify the purity of components
Is the failure on a plastic component? e.g. Phthalates in PVC, Styrene monomer in polystyrene, BPA in polycarbonate, lead or cadmium pigments/stabilizers	• No remedial action is possible by the assembly factory • Failure can be due to pigments, plastic additives, monomers	• Replace the component with a compliant one • The plastic manufacturer needs to reformulate/check levels of residual monomer etc • Alternative plastic-type may need to be selected in some instances e.g. BPA will always be present in polycarbonate
Is the failure on a pigment print, coating, or other embellishments?	• A failure may be due to the base material or pigment prints/embellishments such as flock, glitter	• Test the base material and the print / coating / embellishment separately to establish which part is failing • Replace failing items such as flock, glitter with a compliant alternative • Check all SDS, technical information / CIL declarations to look for obvious sources • Speak for chemical suppliers to ask if failing chemical could be present in their formulation • Test formulations for the failing chemical • Replace the failing formulation with a compliant one
Is the failure dye or pigment-related? **e.g. azo amines, allergenic disperse dyes**	• Some failures can only be a result of using colorants that don't meet the standards • Some failures, such as heavy metals may be due to dyes or pigments • Solving dye related failures is easy but care must be taken with pigment prints on top of dyed grounds and multicolor prints	• Check recipes to see if known failing colorants have been used • Check all SDS, technical information / CIL declarations to look for obvious sources • Speak for chemical suppliers to ask if failing chemical could be present in their formulation • Test formulations for the failing chemical • Replace the failing formulation with a compliant one

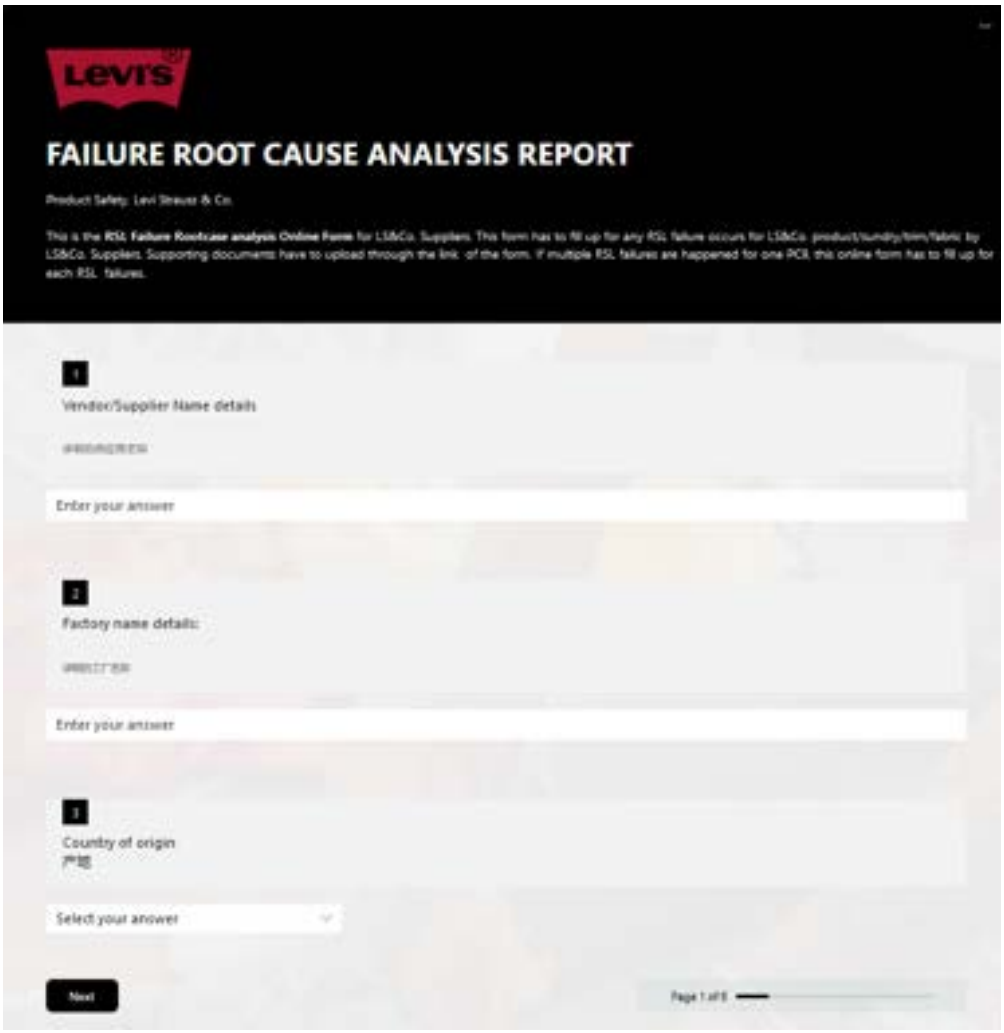
	Notes	RCA / CAP
Is the failure clearly due to the use of a restricted finish? e.g. PFAS water repellent, antimicrobial, or Flame retardant chemicals	• The use of some types of finish is not permitted e.g. Flame retardant and antimicrobial finishes • The use of other types of finish is permitted e.g. water repellent but some specific chemical types are banned	• Check recipes to see if known failing chemicals have been used • Check all SDS, technical information / CIL declarations to look for obvious sources • Speak for chemical suppliers to ask if failing chemical could be present • Test formulations for the failing chemical • Replace permitted finish types e.g. water repellent, with a compliant formulation
Is the failure finish process-related? **e.g. Formaldehyde on resinated viscose, Isocyanates on PU coated materials, Solvents**	• Some chemical failures are almost always related to specific finishes but are due to incorrect processing conditions rather than just the presence of certain chemicals in formulations	• Can the chemical type be changed to something that is a lower risk? E.g. formaldehyde-free, water-based • Check recipes to see if things like pH, catalyst concentration, and so on are correct according to TDS • Check fixation/curing conditions, temperatures are correct
Is the failure related to chemicals that are known to be used or present in specific processes? **e.g. Chromium in leather tanning, Quinoline in disperse dye formulations**	• Some chemicals are known to be only present in specific formulations or processes • They may be due to a control issue (e.g. Cr Vi) or the presence of a chemical in formulations (e.g.quinoline) • If a failure occurs it is possible to narrow down the problem to a specific process in the manufacturing	• Check recipes to see if known failing colorants have been used • Check all SDS, technical information / CIL declarations to look for obvious sources • Speak for chemical suppliers to ask if failing chemical could be present in their formulation • Test formulations for the failing chemical • If appropriate, replace the failing formulation with a compliant one • If appropriate, check recipes and process control to stop the formation of the failing chemical
Is the failure related to chemicals that are not intentionally used but can be present in multiple formulations and processes? e.g. APEOs	• Sometimes it is very difficult to narrow down the initial search for the process that has caused the issue and it can be a laborious exercise to find where the chemical is introduced or created	• Testing of unprocessed substrates and partially processed substrates (e.g. bleached but not dyed, dyed but not finished) for the failing chemical can be quicker and cheaper than testing every formulation

	Notes	RCA / CAP
Is there no conceivable way that the failing chemical could have been used in the manufacturing process?	• If all information checks and formulation tests show no sign of the failing chemical the cause is likely either contamination or the mistaken use of a non-compliant formulation that does not appear on a recipe	• Establish if there are formulations on site that are non-compliant with the LS&Co. chemical requirements • Establish if there are components or finished products on-site that are non-compliant with the LS&Co. chemical requirements • Instigate a strict review of process controls • Instigate strict segregation measures
Is the failure related to chemicals used in product assembly? e.g. Solvents in adhesives, Formaldehyde in bonded interlining	• Normally chemical failures are due to components that fail but sometimes adhesives, interlinings, etc. can fail. • Adhesives and other formulations used in product assembly should be managed just like any other formulation used in component manufacture – there should be SDS, TDS, supplier declarations, certifications and should be included on a CIL	• Confirm all components meet the LS&Co. chemical requirements • Check all SDS, technical information / CILs to look for obvious sources in formulations used in the assembly • Speak for chemical suppliers to ask if failing chemical could be present in their formulation • Test formulations for the failing chemical • Replace the failing formulation with a compliant one
Have the LS&Co. requirements been provided to all facilities involved in the manufacture of components and product assembly?	• Some failures are a result of facilities not knowing the standards	• Ensure all standards, chemicals safety assessment expectations, and documentation requirements are provided to every facility that uses the chemical in the manufacturing of a material, component, or product for LS&Co.

LEVI STRAUSS & CO.

RSL FAILURE RESOLUTION ONLINE FORM (FRF)

Online form is available in LS&CO. Global Chemical Product Safety site. Vendors/Suppliers are required to submit the failure root cause analysis online, accompanied by a detailed rectification plan.

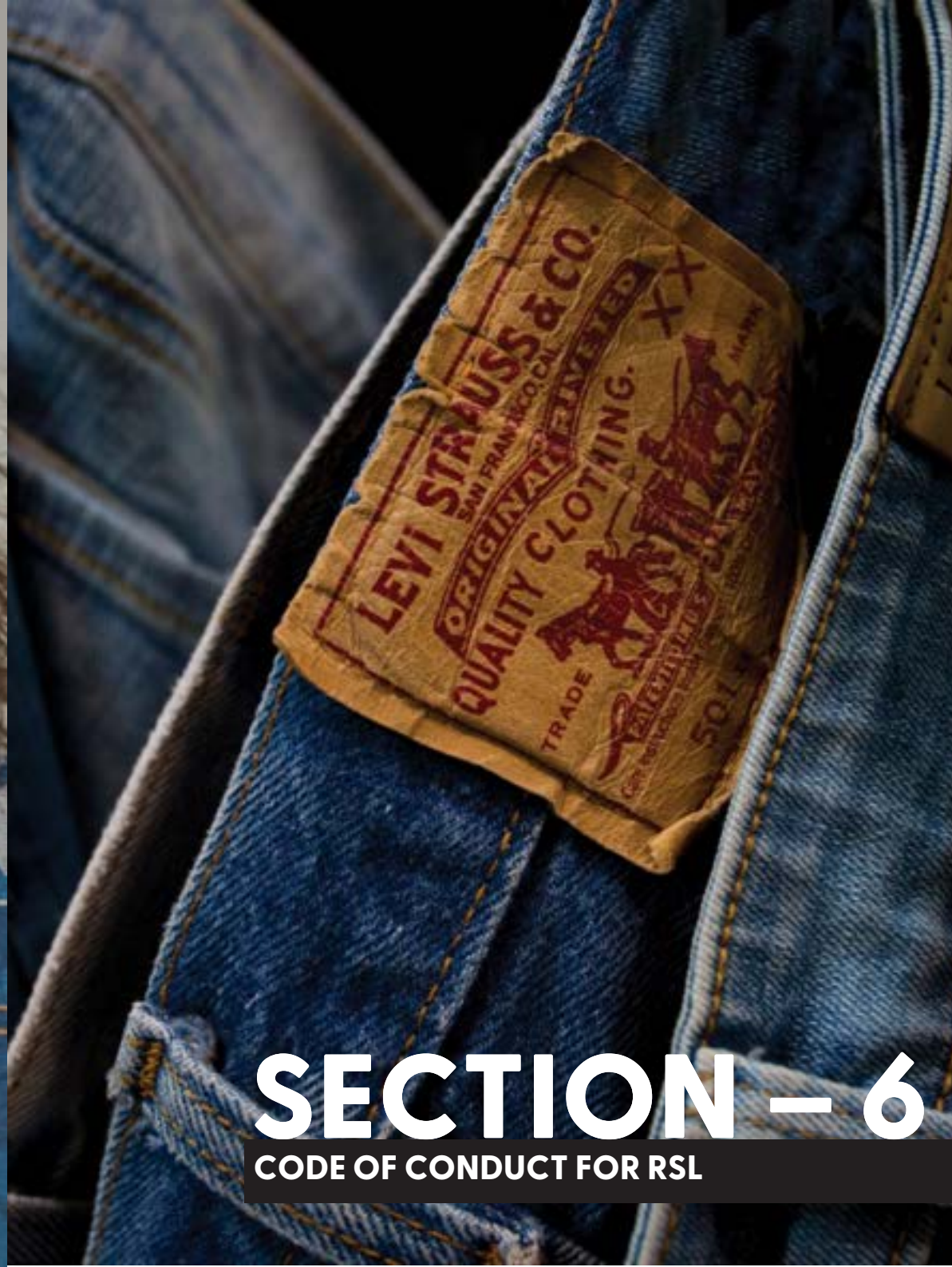


Relevant supporting documents must be uploaded during online submission

- CIL, MSDS, TDS for process chemicals
- Process Recipe and other process control routine documents
- Re-Test Report and additional test reports (if required)
- Component test report if failures occur at the Finish stage.

Follow Up and Actions

- List quantity of material/product affected by the failure
- List status of failed material/product (is it held at shipping, contained in factory etc)
- List shipment destinations
- Describe next steps (hold material, pause production, reject material etc)
- List corrective actions, preventative measures to be implemented
- No shipment will be allowed until the product is rectified, and a passed report is provided, including the root cause analysis and a corresponding action plan.



SECTION – 6

CODE OF CONDUCT FOR RSL

CODE OF CONDUCT FOR RSL

LS&Co. is committed to continuous improvement in relation to chemical management to ensure that products meet and exceed current standards, regulations and expectations.

It is a requirement that all Products, Materials, Chemicals and Other Goods used in the manufacturing of finished products meet LS&Co. Restricted Substances standards and there is an expectation that efforts will be made to go beyond those standards wherever possible.

LS&Co. will encourage the use of safer chemistry by promoting Sustainable materials and processes that go beyond compliance on products at point of sale.

In addition to managing chemicals to ensure product safety, the use of safer chemistry will also provide a safer working environment for those handling chemical formulations and a lower risk of environmental damage.

LS&Co. will:

- Execute necessary RSL agreements prior to engaging in business for all our productions globally
- Ensure chemical compliance and the use of safer chemistry is always included in discussions with vendors at the earliest possible stage of product development
- Ensure that when prices are negotiated, chemical compliance requirements are clearly stated and openly discussed
- Ensure chemical compliance requirements are clearly stated on any sketches, designs or design packs that are passed onto vendors
- Ensure all relevant LS&Co. standards are made available to all actors in a supply chain
- Ensure in-house innovations and developments are thoroughly evaluated for chemical safety before passing onto a supply chain
- Ensure teams are available to discuss queries at any stage of the design, development and production process
- Provide necessary trainings to empower supply chain partners to gain adequate knowledge and to eliminate RSL risks at early stages of product design and developments

Vendors will:

- Ensure timely execution of LS&Co. Supplier compliance agreements as requested and ensure similar agreements kept in place with all Suppliers and Sources in a supply chain
- Comply with the most up to date RSL, any failure to comply with the RSL and the ZDHC MRSL are a material breach of any agreement with LS&Co. and with a LS&Co. Source notwithstanding any other term of that agreement
- Appoint RSL point person to demonstrate relevant data and metrics that the restricted substances are legally managed in LS&Co. products, and to ensure that Materials, Chemicals and Other Goods comply with RSL requirements
- Ensure no RSL listed substances, those prohibited or restricted by (a) LS&Co Priority chemicals RSL usage ban and other policy requirements (refer Section 2) (b)AFIRM RSL or (c) the applicable law of any country and jurisdiction in which the Supplier, Source or LS&Co. conducts business and in any jurisdiction are not used (details in section 3).
- Ensure full transparency of supply route to component manufacturer level
- Ensure full details of all components and component manufacturers are provided at the time of product developments
- Ensure all relevant LS&Co. standards are provided to all Suppliers and Sources in a supply chain, including chemical suppliers, agents and component manufacturers
- Ensure all chemicals, materials and components are tested/certified for RSL before use in LS&Co. productions
- Ensure there is a CIL declarations (refer LS&Co. CIL declaration format in page no 59 & 60.) gathered from each chemical suppliers and component manufacturers that meets (a) LS&Co. Priority chemicals RSL usage ban and other policy requirements (refer Section -2) (b) AFIRM RSL or (c) the applicable law of any country and jurisdiction in which the Supplier, Source or LS&Co. conducts business and in any jurisdiction in which it ships Materials, Chemicals or Other Goods
- Follow LS&Co. Performance standards and conduct all RSL testing according to the LS&Co. RSL requirements at the appropriate time in the buying process
- Ensure all test data and certifications required to verify promotable claims
- Ensure all packaging and assembly materials meet the RSL standards

- Provide any information related to materials, chemicals and process to LS&Co. on demand, which include but not limited to SDS, TDS, Chemical recipes, RSL test reports, shipment quantity and shipment destinations etc.
- Immediately notify LS&Co. of any issues or problems in achieving compliance with the standards
- Declare that each current and future chemical, compound and substance and other goods, that are used, supplied or otherwise delivered to LS&Co.comply with and do not violate the legal restrictions globally, including but not limited to, EU REACH, California Proposition 65, All US State specific Children product regulatory requirements and Toxics in packaging, etc.

Component Manufacturers (including dyers, printers, laundries and tanneries) will:

- Ensure there is a full written inventory
- Source chemicals from reputable chemical suppliers
- Ensure no RSL listed chemicals, those prohibited or restricted by (a) LS&Co. Priority chemicals RSL usage ban and other policy requirements (refer Section-2) (b) AFIRM RSL or (c) the applicable law of any country and jurisdiction in which the Supplier, Source or LS&Co. conducts business and in any jurisdiction are not used (details in section 3)
- Source chemicals that are certified with Screened Chemistry and the formulations are ZDHC MRSL Compliant
- Ensure there is a SDS for all chemicals and formulations
- Ensure there are technical data sheets for all chemicals and formulations
- Ensure there are CIL declarations of conformance from chemical suppliers
- Ensure there are full written recipes with details of all formulations and commodity chemicals
- Ensure standard operating procedures for all processes – including process check to ensure product consistency
- Make independent certifications to demonstrate competence in chemical management available
- Conduct spot checks on incoming formulations for RSL and MRSL compliance
- Conduct spot checks on incoming raw materials for RSL and MRSL compliance
- Conduct RSL tests on finished products as per LS&Co. standards
- Immediately notify vendors and / or LS&Co. of any issues or problems in achieving compliance with the standards

Chemical Suppliers will:

- Provide an SDS for every chemical and formulation
- Provide a technical data sheet for every chemical and formulation
- Ensure no RSL listed chemicals, those prohibited or restricted by (a) LS&Co. Priority chemicals RSL usage ban and other policy requirements (Section - 2) (b) AFIRM RSL or (c) the applicable law of any country and jurisdiction in which the Supplier, Source or LS&Co. conducts business and in any jurisdiction are not used (details in section 3)
- Provide CIL declarations (refer section-6, F for LS&Co. CIL declaration format) of conformity to RSL,MRSL conformance certificates and Screened Chemistry - Full Material Disclosure certificate (or other equivalent certifications)
- Provide declarations of absence of any hazardous substances on request
- Provide detailed formulation compositions on request for promotable claims (under NDA if necessary)
- Provide information to LS&Co. and component manufacturers if standards change and formulations cease to be compliant

A. Suppliers' and Sources' Commitment

Each Supplier or Source of Materials, Chemicals and Other Goods (a) to LS&Co., and (b) to any LS&Co. Supplier or Source when the Materials, Chemicals and Other Goods will be used during the fabrication, manufacture or other processing of a LS&Co. labeled and/or distributed product represents and warrants that each of its Materials, Chemicals and Other Goods complies with all provisions of the RSL (including, but not limited to, the RSL's prohibitions, restrictions, other requirements and all applicable national and other legal requirements). Supplier will defend, indemnify and hold LS&Co. harmless against any allegation, claim, loss, damage, or other detriment resulting from any such Supplier's or Source's non-compliance.

As a Supplier or Source of LS&Co. products or raw materials for LS&Co. products, you are required to understand the RSL product requirements and deliver only compliant products. You are also responsible for seeking guidance from LS&Co. in any situation where you may have doubts or uncertainties about your product's compliance with LS&Co.'s RSL. Compliance with LS&Co.'s RSL is a mandatory condition necessary for satisfying each and every order placed by LS&Co.

B. LS&Co. SUPPLIERS' AND SOURCES' MANAGEMENT SYSTEM REQUIREMENTS SUPPORTING LS &Co. RSL COMPLIANCE AT THE FACTORY

PLAN

- Appoint a RSL liaison (designated as a Technical Representative (TR) in the Suppliers and Sources. (TR roles and responsibilities are defined in Appendix -5)
- Contact LS&Co.'s RSL team with any questions or to request training
- Communicate with and educate all personnel concerning the RSL whose acts or omissions could affect compliance with the RSL
- Communicate copies of all appropriate information concerning the applicable RSL to all of your Suppliers and Sources whose acts or omissions could affect compliance with the LS&Co.RSL.
- Ensure that you and your Suppliers and Sources comply with all applicable legal requirements of the countries and other jurisdictions in which you/they do business, as well as all countries to which they ship any Materials, Chemicals and Other Goods which may be used with respect to LS&Co. . labeled and/or distributed products.

DO

- Execute LS&Co. Supplier RSL compliance agreement annually
- Purchase only Materials, Chemicals and Other Goods which comply with LS&Co.'s RSL requirements
- Use LS&Co. Screened Chemistry program certified and ZDHC MRSL compliant formulations
- Gather SDS, TDS, other certificates if any and verify for RSL compliance for every chemical used by or purchased from any Source
- Understand all the chemical inputs to your production by requesting fully completed Chemical Information Logs (see page no 59 & 60) from your chemical Sources
- Comply with all applicable LS&Co. Chemical policies for Chemicals use and DO NOT USE any LS&Co. RSL Usage ban substances in productions
- Be sure that employees are familiar with the precautions set out in the SDSs or TDSs
- Contact all your Materials, Chemicals and Other Goods Suppliers and Sources to ensure their understanding of LS&Co.'s RSL and their commitment to supplying only RSL compliant chemicals and materials
- Conduct internal staff training
- Document and retain all dyeing, coating, finishing and printing formulations
- Follow the parameters as listed on the latest TDSs and document all chemicals use and process control variables (e.g. pH, curing temperatures, durations, liquor quantities and ratios) as actually used in production with retention of the documentation
- Assess the chemical product safety risk that may encounter and Implement the processes as defined in the chemical recipes or their equivalents

CHECK

- Ensure that only materials and chemicals meeting the RSL requirements are used in the production of LS&Co.-labeled and LS&Co.-distributed products
- Check the validity of all test reports and certificates at every juncture of product season
- Conduct inspections, audits and other control practices to ensure compliance with your obligations under the applicable RSL
- Regularly check process control variables (e.g. pH, curing temperatures, duration, liquor quantities and ratios as per recipes) to validate proper chemical application
- Follow LS&Co. Performance standard guidelines and perform analytical testing at LS&Co.- approved laboratories during product development and production stages
- Perform yearly random RSL compliance verifications as per LS&Co. RSL performance standards

ACT

- Replace Materials, Chemicals and Other Goods of unknown chemical constituents with Materials, Chemicals and Other Goods that meet LS&Co.'s RSL
- Do not ship Materials, Chemicals and Other Goods if you are in doubt about compliance
- Verify RSL compliance through laboratory testing and other appropriate quality control/quality assurance procedures and consult LS&Co. RSL team at the same time
- Investigate the root causes of any actual or potential RSL non-compliance situation and act timely, effectively, and efficiently to both notify LS&Co. and restore full compliance

C. OUTLINE OF LS&Co. RSL PROHIBITIONS, LIMITATIONS AND REQUIREMENTS

The prohibitions, restrictions and other requirements in the RSL are based, in part, on global laws concerning chemicals usage in the manufacturing and/or distribution of the types of products distributed by LS&Co.

The European Union has developed the “Regulation Concerning the Registration, Evaluation, Authorization and Restriction of Chemicals ” or REACH , which is aimed at ensuring the protection of human health and the environment from risks that might be posed by certain exposures to certain doses of specific chemicals . Other countries have developed or are developing similar laws such as, but not limited to, the United States , China , Canada , Mexico , Indonesia , Serbia , Vietnam and South Korea . Moreover , in the United States , many states, including, but not limited to, California, Illinois, Maine, Vermont, Oregon, New York and Washington, have adopted laws concerning chemicals in consumer products , including Chemicals of High Concern (CHCC) in children 's products and their reporting requirements , as well as The Model Toxics in Packaging Legislation requirements for US and Europe packaging requirements (94/62/EC). These and other legal requirements were considered in preparing this edition of the RSL.

Laws and regulations concerning substances are periodically changing as more scientific and other technical information becomes generally accepted , leading to an enhanced understanding of chemicals and any potential effects they might have at certain doses by certain routes of exposure on human health and the environment . Accordingly , LS&Co. will endeavor to publish an updated RSL on a regular basis.

Moreover , by agreeing to furnish any Material , Chemical or Other Good to LS&Co . or by agreeing to comply with this RSL , each Supplier and Source must ensure that each Material , Chemical and Other Good , supplied for use in the manufacturing and distribution of any LS&Co .-labelled and LS&Co .-distributed product does not contain any substance to the extent that the substance is banned or limited (a) under this RSLor (b) under the applicable law of any country and jurisdiction in which the Supplier or Source conducts business and in any jurisdiction in which it ships Materials , Chemicals or Other Goods . In addition , each Supplier is similarly responsible and also liable to LS&Co . for ensuring that each of its Sources similarly complies with this RSLand the aforesaid applicable laws.

Any violation of the RSL or of the aforesaid applicable laws is a violation of all contracts to supply Materials, Chemicals and Other Goods to LS&Co.

D. OBLIGATION TO COMPLY WITH REACH AND ALL OTHER GOVERNMENTAL REQUIREMENTS

While for convenience, this section of the RSL discusses some of the requirements of REACh, the obligation remains with Suppliers and Sources to identify and comply with all applicable requirements as set out in REACh and in the applicable laws of each country and other jurisdictions in which each Supplier and Sources conducts business as well as each country into which each Supplier and Source ships any Materials, Chemicals and Other Goods.

EU REACH: The European Union's Regulation Concerning the Registration, Evaluation, Authorization and Restriction of Chemicals

APPLICATION

This section applies to all Suppliers and Sources manufacturing or supplying Materials, Chemicals and Other Goods for use in LS&Co. labelled and/or distributed products, including, but not limited to, apparel, non-apparel, footwear, accessories, packaging and other products which are intended for distribution or sale in any country within the European Economic Area.

PURPOSE

The information provided below is intended to assist our Suppliers and Sources to comply with REACh [Regulation (EC) Number 1907 /2006 of the European Parliament and of the Council] Every LS&Co. Supplier and Source agree to inform LS&Co. of any substances listed for requirements (see below) in European Chemicals Agency (ECHA website : www.echa.europa .eu) present in any and all Materials , Chemicals and Other Goods intended for use in any LS&Co. labeled and /or distributed apparel , non -apparel , footwear , accessories , and other products . In supplying this information , LS&Co. does not intend to assume all or any part of our Suppliers' and/or Sources' duty to comply with the regulation.

WHAT SUPPLIERS AND SOURCES SHOULD DO?

All LS&Co. Suppliers and Sources shall visit the European Chemicals Agency (ECHA) website https://www.echa.europa.eu/ regularly and comply with the published obligations and guidance regarding chemicals and consumer articles . To help ensure that all products supplied to LS&Co. comply with REACh , each Supplier and Source is obligated to track not only the lists of chemicals with valid requirements but also the registries of intentions until outcomes . Suppliers and Sources shall map each step in their supply chains, including the sourcing and processing of Materials , Chemicals and Other Goods ingredients , and immediately inform LS&Co. according to the Information Duty (Article 33) of all cases where a substance listed in the “Candidate List of Substances of Very High Concerns for Authorization " is present in the product or other Materials, Chemicals and Other Goods provided for use in any LS&Co. labeled or distributed product. Additionally, authorization requirements (as per Annex XIV) and restriction requirements (as per Annex XVII) in REACh regulation shall be followed by any Suppliers or Sources situated in Europe.

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*Substances of Very High Concerns (SVHC) are defined as CMR 1,CMR 2,PBT,vPvB or similar substances as given in the legal text of REACh, Annex XVII for CMR, and on the European Chemicals Agency website, www.echa.europa.eu/

The listing is inclusive of candidate substances of Substances of Very High Concerns (SVHC) for Authorization and Registry of intentions list, as defined below:

Candidate substances can be found at http://echa.europa.eu/candidate-list-table

Registry of SVHC intentions until outcome are found at https://echa.europa.eu/registry-of-svhc-intentions

Authorization list of Substances: https://echa.europa.eu/authorisation-list

Restriction list of Substances: https://echa.europa.eu/substances-restricted-under-reach Registry of restriction intentions until outcome: https://echa.europa.eu/registry-of-restriction-intentions

E. OBLIGATION TO COMPLY WITH US STATES CHEMICALS OF HIGH CONCERN IN CHILDREN PRODUCTS AND ITS REPORTING REQUIREMENTS

All LS&Co. Suppliers and Sources shall visit US state regulatory websites (refer below) regularly and comply with the published obligations and guidance regarding chemicals and children's products. To help ensure that all children's products supplied to LS&Co. comply with these state laws, each Supplier and Source is obligated to track and monitor Materials, Chemicals and Other Goods, used or supplied for the fabrication, manufacturing or processing of LS&Co. labelled and/or distributed children's products.

- The Oregon Health Authority website for the current High Priority Chemicals of Concern for Children's Health (HPCCCHs) as listed: https://www.oregon.gov/oha/ph/healthyenvironments/healthyneighborhoods/toxicsubstances/pages/toxic-free-kids.aspx
- The Maine Department of Environmental Protection website for the current Priority Chemicals as listed: https://www.maine.gov/dep/safechem/childrens-products/index.html
- The Minnesota Department of Health website for the published obligations and guidance regarding chemicals and children's products: https://www.health.state.mn.us/communities/environment/childenvhealth/tfka/index.html
- The Vermont Department of Health website for the published obligations and guidance regarding current chemicals of high concern to children's products (CHCC): https://www.healthvermont.gov/environment/children/chemicals-childrens-products
- The Washington Department of Ecology website with the published obligations and guidance regarding chemicals and children's products : https ://ecology .wa .gov /Waste -Toxics /Reducing -toxic-chemicals /Childrens -Safe-Products-Act

Suppliers and Sources shall map each step in their supply chains, including the sourcing and processing of Materials, Chemicals and Other Goods ingredients, and immediately inform LS&Co. of all cases where a priority chemical HPCCCH, or CHCC is present in the product or other Materials, Chemicals and Other Goods provided for use in any LS&Co. labeled or distributed product.

OTHERS

Other countries or states have developed or are developing similar laws and regulations, such as, but not limited to, US, China, Canada, Mexico, Indonesia, Serbia, Vietnam and South Korea. These and other regulatory requirements are incorporated into the RSL.

Lists of restricted substances are constantly changing as more information from scientists and health professionals becomes available, leading to an enhanced understanding of chemicals and their effect on human health and the environment. Accordingly, LS&Co. will endeavor to publish an updated list on a regular basis. That said, it remains the responsibility of each Supplier and Source to identify and comply with all applicable requirements as set out under these regulations / requirements by each country and other jurisdictions in which each Supplier and Source conducts business and into which it ships any Materials, Chemicals and Other Goods.

F. Chemical Information Log (CIL)

APPLICATION

LS&Co. Suppliers and Sources must communicate with their chemical and material Sources about the content and requirements of the LS&Co. RSL. Suppliers and Sources must request a comprehensive Chemical Information Log ("CIL") from each and every chemical and material Source. Chemical and Material Sources must review LS&Co.'s RSL requirements to determine which substance(s) in their preparations (chemical mixtures), if any, has the potential to violate any provision of the applicable LS&Co. RSL.

The CIL must be completed for each substance used in the manufacturing of any LS&Co. product. The CIL includes 4 Sections. The first section must be completed with the chemical/material trade name, as indicated on product packaging documents, SDS and label. For each preparation, the chemical and material supplier shall indicate whether such chemical or material:

(1) contains an RSL substance, or
(2) may form an RSL substance during normal processing conditions

When a substance constitutes, contains, or may form, a resulting substance containing a RSL component in a concentration that could exceed a corresponding RSL restriction, the chemical supplier must identify the RSL component of the resulting substance and concentration on the CIL. The concentration set forth on the CIL must be the concentration of the RSL substance in the resulting substance.

PURPOSE

LS&Co. acknowledges that superior knowledge of specific chemical data and characteristics is likely to reside with the chemical Source. It is, therefore, imperative that each chemical Source properly communicate
to each of its customers (each Supplier) the existence of any RSL listed substances in any Materials, Chemicals and Other Goods it furnishes to the Supplier.

LS&Co. CHEMICAL INFORMATION LOG

SECTION-1: SUPPLIER INFORMATION

Supplier Company Name & Address:	**Chemical/Product Trade Name(s):**
Manufacturer Name & Address : **(If different from the above)**	**Regulatory or EHS Contact (Email & Phone no):**
Date of Log:	**LS&Co.RSL version reference):** **(Example : 2025 version)**

Please provide a current copy of:

- ☐ SDS (required)
- ☐ Product Specifications (if available)
- ☐ Screened Chemistry certificate (required)
- ☐ Any other 3rd party certificates (e.g OEKO-TEX®, GOTS, LWG etc)
- ☐ Technical Data Sheet included (if available)
- ☐ Certificate of Analysis (if available)
- ☐ ZDHC/Regulatory declarations (self) (if available)

Location of Chemical / material production (Country) : _____

Mention Chemical use category: _____
(Example: Dyes, Pigments, Auxiliary, Cleaning, Maintenance and process related)

Instructions: If any Materials, Chemicals and Other Goods which you furnish to the LS&Co. Supplier, Source or to LS&Co. constitute, contain, or form any substance whose nature or concentration might exceed or cause the concentration on the final product to exceed any prohibition, limitation, other requirement in the most recent LS&Co. RSL or other applicable legal requirement, please provide the following information:

SECTION 2: LS&CO. RSL DECLARATION

The product supplied to LS&Co.supply chain is a ☐ Chemical ☐ Article

Article Definition: An "article" means a manufactured item, other than a fluid or particle: (i) which is formed to a specific shape or design during manufacture; (ii) which has end use function(s) dependent in whole or in part upon its shape or design during end use; and (iii) which under normal conditions of use does not release more than very small quantities, e.g. minute or trace amounts, of a hazardous chemical and does not pose a physical hazard or health risk. OSHA Hazard Communication Standard, 29 CFR 1910.1200 (c) (Example: Trims, accessories, and packaging materials)

Trade Name	Contains RSL Substance [YES/NO]	Forms RSL Substance [YES/NO]	Name of Restricted Substance	CAS No.	Concentration in preparation (ppm or %)	Intentional Use (or) Impurity

SECTION 3: CHEMICALS OF INTEREST INFORMATION

Please indicate if your material or any of its components appear on any of the following country specific regulations or restricted substance lists indicated in Column below.

If yes, please specify the chemical and the amount present

	Regulation/ Restricted Substance List		Details (CAS # and amount)
☐	LS&Co. Priority chemicals list and RSL Usage Ban policy	☐ Yes ☐ No	
☐	US Consumer Product Safety Improvement Act (US CPSIA)	☐ Yes ☐ No	
☐	Canada Consumer Product Safety Act (CCPSA)	☐ Yes ☐ No	
☐	California Prop 65	☐ Yes ☐ No	
☐	Obligations to comply with US states Chemicals of High concern list in Children Products	☐ Yes ☐ No	
☐	US Toxic Substance Control Act (TSCA)	☐ Yes ☐ No	
☐	EU –REACH Substance of Very High Concern list	☐ Yes ☐ No	

SECTION 4: CERTIFICATION AND PREPARER INFORMATION

I certify that the information above is true and correct and that the Chemicals of Interest declaration provided by me on this form are either not in the chemical/material supplied to LS&Co. or are disclosed on this form. If the above product information provided on this form changes,I agree to update and inform LS&Co., 30 days prior to the change.

Name:	Date:
Title:	Email:
Address: City/State/Zip:	Phone:
Country:	Fax:
Signature: I certify that the foregoing is accurate and that I am authorized to sign on behalf of the company. Name: Date:	

Signature Company Stamp

Appendix 1 - PFASs (Perfluoroalkyl / Polyfluoroalkyl Substances), All PFAS defined as fluorinated organic chemicals containing at least one fully fluorinated carbon atom, but not limited to, the following :

Substance	CAS Number	Limit Value Final Product (mg/kg)	Test Method
All PFAS as measured by total organic fluorine.	Various	50 ppm	EN 14582:2016 or ASTM D7359:2018 (Methods qualify for total fluorine only)
Perfluorooctanesulfonic acid (PFOS) and its salts, and PFOS-related substances			
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	Usage Ban PFOS and its salts [TR = 25 ppb -Total] PFOS-related substances [TR = 1 ppm - Total]	All materials Extraction with an organic solvent, GC-MS and LC-MS. Based on EN ISO 23702-1:2023 or EN 17681-1:2022 & 17681-2:2022 Important note: Upon publication by CEN, method prEN 17681-1:2024 for targeted PFAS analysis will become the recommended method for textiles. Significantly higher findings of various PFAS analytes are possible with this method, especially FTOHs. EN ISO 23702-1:2023 will remain the recommended method for leather.
Perfluorooctanesulfonic acid, potassium salt (PFOS-K)	2795-39-3		
Perfluorooctanesulfonic acid, lithium salt (PFOS-Li)	29457-72-5		
Perfluorooctanesulfonic acid, ammonium salt (PFOS-NH4)	29081-56-9		
Perfluorooctane sulfonate diethanolamine salt (PFOS-NH(OH)2)	70225-14-8		
Perfluorooctanesulfonic acid, tetraethylammonium salt (PFOS- N(C2H 5)4)	56773-42-3		
N-Ethylperfluoro-1-octanesulfonamide (N-Et-FOSA)	4151-50-2		
N-Methylperfluoro-1-octanesulfonamide (N-Me-FOSA)	31506-32-8		
2-(N-Ethylperfluoro-1-octanesulfonamido)-ethanol (N-Et-FOSE)	1691-99-2		
2-(N-Methylperfluoro-1-octanesulfonamido)-ethanol (N-Me-FOSE)	24448-09-7		
Perfluoro-1-octanesulfonyl fluoride (POSF)	307-35-7		
Perfluorooctane sulfonamide (PFOSA)	754-91-6		
Didecyldimethyl ammonium perfluorooctane sulfonate	251099-16-8		

Perfluorooctanoic acid (PFOA), its salts, polymers related substances	Various	Usage Ban [TR = 25 ppb – Total]	All materials Extraction with an organic solvent, GC-MS and LC-MS. Based on EN ISO 23702-1:2023 or EN 17681-1:2022 & 17681-2:2022 Important note: Upon publication by CEN, method prEN 17681-1:2024 for targeted PFAS analysis will become the recommended method for textiles. Significantly higher findings of various PFAS analytes are possible with this method, especially FTOHs. EN ISO 23702-1:2023 will remain the recommended method for leather.
PFOA and Its Salts			
Perfluorooctanoic acid (PFOA)	335-67-1		
Sodium perfluorooctanoate (PFOA-Na)	335-95-5		
Potassium perfluorooctanoate (PFOA-K)	2395-00-8		
Silver perfluorooctanoate (PFOA-Ag)	335-93-3		
Perfluorooctanoyl fluoride (PFOA-F)	335-66-0		
Ammonium pentadecafluorooctanoate (APFO)	3825-26-1		

Perfluorooctanoic acid (PFOA) related substances		Usage ban [TR = 1 ppm - Total]	All materials Extraction with an organic solvent, GC-MS and LC-MS. Based on EN ISO 23702-1:2023 or EN 17681-1:2022 & 17681-2:2022 Important note: Upon publication by CEN, method prEN 17681-1:2024 for targeted PFAS analysis will become the recommended method for textiles. Significantly higher findings of various PFAS analytes are possible with this method, especially FTOHs. EN ISO 23702-1:2023 will remain the recommended method for leather.
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	39108-34-4		
Methyl perfluorooctanoate (Me-PFOA)	376-27-2		
Ethyl perfluorooctanoate (Et-PFOA)	3108-24-5		
2-Perfluorooctylethanol (8:2 FTOH)	678-39-7		
1H,1H,2H,2H-Perfluorodecyl acrylate (8:2 FTAC)	27905-45-9		
1H,1H,2H,2H-Perfluorodecyl methacrylate (8:2 FTMA)	1996-88-9		
2H,2H-Perfluorodecanoic acid (H2PFDA)	27854-31-5		

C9-C14 Perfluorocarboxylic acids (PFCAs) and their salts		Usage Ban [TR = 25 ppb – Total]	All materials Extraction with an organic solvent, GC-MS and LC-MS. Based on EN ISO 23702-1:2023 or EN 17681-1:2022 & 17681-2:2022 Important note: Upon publication by CEN, method prEN 17681-1:2024 for targeted PFAS analysis will become the recommended method for textiles. Significantly higher findings of various PFAS analytes are possible with this method, especially FTOHs. EN ISO 23702-1:2023 will remain the recommended method for leather.
Perfluorononanoic acid (PFNA) and its salts	375-95-1; et al.		
Perfluorodecanoic acid (PFDA) and its salts	335-76-2; et al.		
Perfluoroundecanoic acid (PFUnA) and its salts	2058-94-8; et al.		
Perfluorododecanoic acid (PFDoA) and its salts	307-55-1; et al.		
Perfluorotridecanoic acid (PFTrA) and its salts	72629-94-8; et al.		
Perfluorotetradecanoic acid (PFTeA) and its salts	376-06-7; et al.		
Perfluoro-3,7-dimethyloctanoic acid (PF-3,7-DMOA) and its salts	172155-07-6,et al.		

C9-C14 Perfluorocarboxylic acids (PFCAs) -related substances		Usage ban [TR = 260 ppb - Total]	All materials Extraction with an organic solvent, GC-MS and LC-MS. Based on EN ISO 23702-1:2023 or EN 17681-1:2022 & 17681-2:2022 Important note: Upon publication by CEN, method prEN 17681-1:2024 for targeted PFAS analysis will become the recommended method for textiles. Significantly higher findings of various PFAS analytes are possible with this method, especially FTOHs. EN ISO 23702-1:2023 will remain the recommended method for leather.
1H,1H,2H,2H-Perfluorododecyl acrylate (10:2 FTA)	17741-60-5		
1H,1H,2H,2H-Perfluorododecyl methacrylate (10:2 FTMA)	2144-54-9		
1H,1H,2H,2H-Perfluorododecanol (10:2 FTOH)	865-86-1		
2H 2H, 3H, 3H-Perufluoroundecanoic acid (H4PFUnA)	34598-33-9		
2-Perfluorooctylethanol (8:2 FTOH)	678-39-7		
1H,1H,2H,2H-perfluorotetradecan-1-ol (12:2 FTOH)	39239-77-5		
1H,1H,2H,2H-Perfluorododecanesulphonic acid (10:2 FTS)	120226-60-0		
1H,1H,2H,2H-Perfluorododecyl iodide (10:2 FTI)	2043-54-1		
1H,1H,2H,2H-Perfluorotetradecyl iodide (12:2 FTI)	30046-31-2		

Other PFAS			
Perfluorohexanoic acid (PFHxA) and its salts	307-24-4; et al.	Usage ban [TR = 25 ppb - Total]	All materials Extraction with an organic solvent, GC-MS and LC-MS. Based on EN ISO 23702-1:2023 or EN 17681-1:2022 & 17681-2:2022 Important note: Upon publication by CEN, method prEN 17681-1:2024 for targeted PFAS analysis will become the recommended method for textiles. Significantly higher findings of various PFAS analytes are possible with this method, especially FTOHs. EN ISO 23702-1:2023 will remain the recommended method for leather.
Perfluorohexanesulfonic acid (PFHxS) and its salts	355-46-4; 3871-99-6 55120-77-9; 68259-08-5; 82382-12-5; et al.	Usage ban [TR = 25 ppb - Total]	
Perfluorohexanesulfonic acid (PFHxS) related substances	68259-15-4;41997-13-1	Usage ban [TR = 1 ppm - Total]	
Perfluorohexanoic acid (PFHxA) related substances	17527-29-6; 2144-53-8; 27619-97-2; 647-42-7	Usage ban [TR = 1 ppm - Total]	
Perfluorobutanesulfonic acid (PFBS) and related substances	375-73-5; et al.	Usage Ban [TR = 1 ppm each]	
Perfluoroheptanesulfonic acid (PFHpS) and related substances	375-92-8; et al.		
Perfluorodecanesulfonic acid (PFDS) and related substances	335-77-3; et al.		
Perfluorobutyric Acid (PFBA) and related substances	375-22-4; et al.		
Perfluoropentanoic Acid (PFPeA) and related substances	2706-90-3; et al.		
Perfluoroheptanoic acid (PFHpA) and related substances	375-85-9; et al.		
2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acid, its salts and its acyl halides (HFPO-DA)	13252-13-6; et al.		
7H-Perfluoroheptanoic acid (7H-PFHpA)	1546-95-8		
2H,2H,3H,3H-Perfluoroundecanoic acid (8:3 Fluorotelomer carboxylic acid, 8:3 FTCA, H4PFUnA)	34598-33-9		
Mono[2-(perfluorohexyl)ethyl] phosphate (6:2 monoPAP)	57678-01-0		
Mono[2-(perfluorooctyl)ethyl] phosphate (8:2 monoPAP)	57678-03-2		
Bis[2-(perfluorohexyl)ethyl]phosphate (6:2 diPAP)	57677-95-9		
Bis[2-(perfluorooctyl)ethyl] phosphate (8:2 diPAP)	678-41-1		
(Perfluorohexyl)ethyl (perfluorooctyl)ethyl hydrogen phosphate (6:2/8:2 diPAP)	943913-15-3		

Appendix 2: Azo Dyes which, through reductive cleavage, may form restricted substances (amines)

Dye Name Color Index #	CAS Number (if available)	Dye Name Color Index #	CAS Number (if available)	Dye Name Color Index #	CAS Number (if available)
Acid Black 29	12217-14-0	Direct Blue 8	2429-71-2	Direct Orange 6	6637-88-3
Acid Black 94	6358-80-1	Direct Blue 9	No CAS number	Direct Orange 7	2868-76-0
Acid Black 131	12219-01-1	Direct Blue 10	4198-19-0	Direct Orange 8	64083-59-6
Acid Black 132	12219-02-2	Direct Blue 14	72-57-1	Direct Orange 10	6405-94-3
Acid Black 209	No CAS number	Direct Blue 15	2429-74-5	Direct Orange 108	No CAS number
Acid Brown 415	No CAS number	Direct Blue 22	2586-57-4	Direct Red 1	25188-24-3
Acid Orange 24	1320-07-6	Direct Blue 25	25180-27-2	Direct Red 2	992-59-6
Acid Orange 45	2429-80-3	Direct Blue 35	No CAS number	Direct Red 7	No CAS number
Acid Red 4	5858-39-9	Direct Blue 53	314-13-6	Direct Red 10	25188-29-8
Acid Red 5	No CAS number	Direct Blue 76	16143-79-6	Direct Red 13	25188-30-1
Acid Red 24	No CAS number	Direct Blue 151	110735-25-6	Direct Red 17	No CAS number
Acid Red 73	5413-75-2	Direct Blue 160	No CAS number	Direct Red 21	6406-01-5
Acid Red 85	3567-65-5	Direct Blue 173	No CAS number	Direct Red 22	No CAS number
Acid Red 114	6459-94-5	Direct Blue 192	159202-76-3	Direct Red 24	No CAS number
Acid Red 115	No CAS number	Direct Blue 201	60800-55-7	Direct Red 26	No CAS number
Acid Red 116	No CAS number	Direct Blue 215	6771-80-8	Direct Red 28	573-58-0
Acid Red 128	6548-30-7	Direct Blue 295	6420-22-0	Direct Red 37	3530-19-6

Acid Red 148	No CAS number	Direct Brown 1	3811-71-0	Direct Red 39	6358-29-8
Acid Red 150	No CAS number	Direct Brown 1:2	2586-58-5	Direct Red 44	6548-29-4
Acid Red 158	8004-55-5	Direct Brown 2	25255-06-5	Direct Red 46	2302-97-8
Acid Red 167	No CAS number	Direct Brown 6	25180-39-6	Direct Red 62	No CAS number
Acid Red 264	No CAS number	Direct Brown 25	33363-87-0	Direct Red 67	No CAS number
Acid Red 265	6358-43-6	Direct Brown 27	No CAS number	Direct Red 72	8005-64-9
Acid Red 420	No CAS number	Direct Brown 31	25180-41-0	Direct Violet 1	25188-44-7
Acid Violet 12	6625-46-3	Direct Brown 33	No CAS number	Direct Violet 12	2429-75-6
Basic Brown 4	5421-66-9	Direct Brown 51	No CAS number	Direct Violet 21	No CAS number
		Direct Brown 59	6247-51-4	Direct Violet 22	25329-82-2
Basic Red 42	No CAS number	Direct Brown 79	6483-77-8	Direct Yellow 1	No CAS number
Basic Red 111	113741-92-7	Direct Brown 95	16071-86-6	Direct Yellow 24	6486-29-9
Direct Black 4	25156-49-4	Direct Brown 101	No CAS number	Direct Yellow 48	No CAS number
Direct Black 29	No CAS number	Direct Brown 154	6360-54-9	Disperse Orange 149	85136-74-9
Direct Black 38	1937-37-7	Direct Brown 222	No CAS number	Disperse Red 151	No CAS number
Direct Black 91	6739-62-4	Direct Green 1	3626-28-6	Disperse Yellow 7	6300-37-4
Direct Black 154	54804-85-2	Direct Green 6	4335-09-5	Disperse Yellow 23	6250-22-3
Direct Blue 1	3814-14-3	Direct Green 8	25180-47-6	Disperse Yellow 56	54077-16-6
Direct Blue 2	2429-73-4	Direct Green 8:1	No CAS number	Solvent Orange 7	3118-98-6
Direct Blue 3	No CAS number	Direct Green 85	72390-60-4	Solvent Red 19	6368-72-5
Direct Blue 6	2602-46-2	Direct Orange 1	54579-28-1	Solvent Red 23	85-86-9

Appendix 3: Pigments which, through reductive cleavage, may form restricted substances (amines)

Pigment Name	CAS Number (if available)	C.I. Number	Pigment Name	CAS Number (if available)	C.I. Number
Permanent Brown B	No CAS number	12800	Pigment Red 42	6358-90-3	21210
Pigment Blue 25	10127-03-4	21180	Pigment Red 114	6358-47-0	12351
Pigment Blue 26	5437-88-7	21185	Pigment Red 162	No CAS number	12431
Pigment Chrome Yellow L Paste	No CAS number	12720	Pigment Yellow 12	6358-85-6	21090
Pigment Green 10	51931-46-5	12775	Pigment Yellow 13	5102-83-0	21100
Pigment Orange 3	No CAS number	12105	Pigment Yellow 14	5468-75-7	21095
Pigment Orange 13	3520-72-7	21110	Pigment Yellow 17	4531-49-1	21105
Pigment Orange 14	No CAS number	21165	Pigment Yellow 49	15110-84-6	11765
Pigment Orange 15	6358-88-9	21130	Pigment Yellow 55	6358-37-8	21096
Pigment Orange 16	6505-28-8	21160	Pigment Yellow 63	14569-54-1	21091
Pigment Orange 34	15793-73-4	21115	Pigment Yellow 83	5567-15-7	21108
Pigment Orange 44	17457-73-5	21162	Pigment Yellow 87	No CAS number	21107:1
Pigment Orange 50	No CAS number	21070	Pigment Yellow 114	71872-66-7	21092
Pigment Orange 63	No CAS number	21164	Pigment Yellow 124	67828-22-2	21107
Pigment Red 7	6471-51-8	12420	Pigment Yellow 126	90268-23-8	21101
Pigment Red 8	6410-30-6	12335	Pigment Yellow 127	68610-86-6	21102
Pigment Red 17	6655-84-1	12390	Pigment Yellow 152	20139-66-6	21111
Pigment Red 22	6448-95-9	12315	Pigment Yellow 170	31775-16-3	21104
Pigment Red 37	6883-91-6	21205	Pigment Yellow 171	53815-04-6	21106
Pigment Red 38	6358-87-8	21120	Pigment Yellow 172	No CAS number	21109
Pigment Red 39	No CAS number	21080	Pigment Yellow 174	78952-72-4	21098
Pigment Red 41	No CAS number	21200	Pigment Yellow 176	90268-24-9	21103
			Pigment Yellow 188	23792-68-9	21094

APPENDIX -4 - LS&Co. EMERGING ISSUES POLICY

In addition to the restrictions on specific chemicals listed on the AFIRM RSL and priority chemicals banned by LS&Co. there are several emerging chemical issues that must be considered when manufacturing components or products for LS&Co.

- CMRs (Carcinogens, Mutagens, Reproductive Toxins)
- Endocrine Disruptors (EDCs)
- PBT's (Persistent, Bioaccumulative, Toxic)
- Skin Sensitisers

Purpose:

1. Ensure product safety by avoiding the use of CMRs,Endocrine Disruptors, PBTs, and Skin Sensitizers as chemical inputs
2. Ensure product safety by avoiding the use of formulations containing high levels of contamination by CMRs, Endocrine Disruptors, PBTs, and Skin Sensitizers
3. Ensure worker safety by removing formulations containing CMRs, Endocrine Disruptors, PBTs, and Skin Sensitizers from inventories
4. Ensure protection of aquatic species via avoiding inputs containing CMRs, Endocrine Disruptors, PBTs, and Skin Sensitizers
5. Promote a better understanding of the contents of formulations to promote substitution of CMRs, Endocrine Disruptors, PBTs, and Skin sensitizers with safer alternatives

Policy:

Formulations that contain chemicals with the above categorisations should not be deliberately used and safer alternatives, if available, should be sought. Some are illegal and must not be used in any circumstances.

1. If there are any formulations containing chemicals with these categorisations that are legal and cannot be readily replaced by safer alternatives, the supplier must contact LS& Co. (RSL @levi.com) to discuss the issue and options.
2. LS&Co works proactively with multi-stakeholder initiatives and supply chain partners to develop and implement safer alternatives, and, in most cases, a practical substitute can be implemented. Where it is not possible to find a practical solution in the short term, LS&Co will advise whether continued use is permitted and work with stakeholders to seek alternatives.
3. Chemical formulators must provide Safety data sheets (SDS), Technical data sheets (TDS) and Chemical Information Log (CIL) declarations in LS&Co. specified format for all chemicals and formulations. They are legally obliged to highlight the presence of hazardous chemicals on safety data sheets so the presence of any CMRs, EDs, PBTs or skin sensitizers should be highlighted.
4. Suppliers to LS&Co must provide a CIL declaration
5. It is recommended that Screened Chemistry program certified and ZDHC MRSL compliant formulations are used where possible

Information

The following table summarizes the hazard categorization and provides a summary of H-phrases associated with the emerging issues. It should be noted that there are different categories and, whilst the avoidance of all categories is preferable, the use of a less harmful category chemical (e.g. category 2 compared to category 1) is preferable.

Issue	Brief Description	Sub-Category	Sub-Category Description	GHS Hazard Statements	Examples	Notes	References
CMR	Carcinogenic - a chemical that cause cancer Mutagenic – a chemical that causes changes to DNA Reproductive Toxin – a chemical that adversely affects reproduction of causes birth defects	Category 1A	Known Human Carcinogen (H 340) Known Human Mutagen (H 350) Known Human Reproductive Toxin (H360) Based on HUMAN evidence	"H340: May cause genetic defects H341: Suspected of causing genetic defects H350: May cause cancer H351: Suspected of causing cancer H360: May damage fertility or the unborn child H361: Suspected of damaging fertility or the unborn child "	"Benzene Chrome VI Formaldehyde Cadmium"	A chemical is deemed a CMR if any one of the C, M or R criteria are fulfilled. Several Cat 1A and Cat 1B are legally restricted by REACH in textile and leather products above specified thresholds	CMRs in Textiles Regulation EU 2018/1513, entry 72 in Annex XVII of REACH https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2018.256.01.0001.01.ENG
		Category 1B	Presumed Human Carcinogen (H 340) Presumed Human Mutagen (H 350) Presumed Human Reproductive Toxin (H360) Based on ANIMAL studies				
		Category 2	Suspected Human Carcinogen (H 341) Suspected Human Mutagen (H 351) Suspected Human Reproductive Toxin (H 361) Based on limited studies of animals or humans				
Endocrine Disruptor	A chemical that alters the function of the hormone system	EU proposals being considered		H341: Suspected of causing genetic defects H360: May damage fertility or the unborn child H361d: Suspected of damaging the unborn child H361e: May damage the unborn child H361f: Suspected of damaging fertility H361g: may damage fertility H362: May cause harm to breastfed children	"Bisphenol A Polybrominated Diphenyl Ethers APEO's Phthalates PFOA "	There is no harmonised method of assessment and categorisation yet, but it is anticipated that category 1 (known and presumed endocrine disruptors) and category 2 (suspected endocrine disruptors) will emerge	Links to further information https://ec.europa.eu/environment/chemicals/endocrine/strategy/substances_en.htm#priority_list https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2726844/ https://edlists.org/

Information

Issue	Brief Description	Sub-Category	Sub-Category Description	GHS Hazard Statements	Examples	Notes	References
PBT	Persistent – a chemical that does not readily biodegrade Bio accumulative – a chemical that accumulates in the tissues of animal 'Toxic' – in the case of PBT's 'toxic' can relate to several properties such as carcinogenicity, mutagenicity, specific target organ toxicity, or aquatic toxicity.	PBT	P = persistent – does not biodegrade in lab tests B = Bio accumulative – accumulates in animal Tssues T = any of the following carcinogenic carcinogenic (category 1A or 1B), germ cell mutagenic (category 1A or 1B) toxic for reproduction (category 1A, 1B or 2) specific target organ toxicity after repeated exposure (STOT RE category 1 or 2) acute aquatic toxicity data E(L)C50 < 0.01 mg/L If any EC50 or LC50 from acute (short-term) aquatic toxicity studies < 0.1 mg/L, then the substance is a potential T candidate. Chronic (long-term) aquatic toxicity studies need to be carried out if the substance has been confirmed to be P or B. If the 'No observable adverse effect concentration' (NOEC) or EC10 from chronic aquatic toxicity studies (daphnia, fish, algae) < 0.01 mg/L, the substance will be confirmed as a T substance. Studies are conducted on both aquatic and mammalian toxicity	Because of the complexity of the 'toxic' categorisation there are numerous GHS Hazard Statements that may be applied to PBT substances.	PCBs Mercury Some restricted pesticides	In addition to the PBT categorisation, where all three criteria must be met, regulatory authorities are looking at the P,B and T individually and in combination - for example the German authorities are considering restric ons for substances considered persistent, mobile and toxic.	Links to further information https://echa.europa.eu/information-on-chemicals/pbt-vpvb-assessments-under-the-previous-eu-chemicals-legislation?p_p_id=viewsubstances_WAR_echarevsubstanceportlet&p_p_lifecycle=0&p_p_state=normal&p_p_mode=view&_viewsubstances_WAR_echarevsubstanceportlet_delta=50&_viewsubstances_WAR_echarevsubstanceportlet_orderByCol=staticField_-104&_viewsubstances_WAR_echarevsubstanceportlet_orderByType=asc&_viewsubstances_WAR_echarevsubstanceportlet_resetCur=false&_viewsubstances_WAR_echarevsubstanceportlet_cur=1
		vPvB (very persistent / very bio accumulative)	vPvB is attributed to chemicals with the very lowest levels of biodegradation and the very highest levels of bioaccumulation. There are slightly different criteria for vPvB in different jurisdictions, but the concept is the same.				

Information

Issue	Brief Description	Sub-Category	Sub-Category Description	GHS Hazard Statements	Examples	Notes
Skin Sensitiser	A chemical that causes an allergic reaction via an immunological response after repeated exposure	Category 1A	Substances showing a high frequency of occurrence in humans and/or a high potency in animals can be presumed to have the potential to produce significant sensitization in humans	H 317: may cause an allerg	Certain disperse dyes (listed on the RSL) and certain di-isocyanates.	EU legislation on skin sensitisers in textiles and leather is being developed and restrictions on specific substances are expected References: A list of skin sensitizers that may be restricted in the future on textiles and leather by EU legislation can be found here https://echa.europa.eu/registry-of-restriction-intentions/-/dislist/details/0b0236e182446136
		Category 1B	Substances showing a low to moderate frequency of occurrence in humans and/or a low to moderate potency in animals can be presumed to have the potential to produce sensitization in humans. Information on all hazard classes			

APPENDIX 5 TECHNICAL REPRESENTATIVE (TR) ROLES AND RESPONSIBILITIES

PURPOSE

The Technical Representative's (TR) core deliverable is to demonstrate relevant data and metrics that the restricted substances are legally managed in LS&Co. products, and ensure that Materials, Chemicals, and Other Goods comply with the applicable chemical content and chemical exposure laws of every governmental jurisdiction in which those products are fabricated, manufactured, processed or distributed; and protect the health and safety of consumers handling LS&Co. labeled and/or distributed finished products. And also, the TR is responsible and authorized for implementing the LS&Co.RSL – Manufacturing Control Program for the factory locations.

SCOPE OF RESPONSIBILITIES

• Technical Representative shall be able to demonstrate that brand-specific RSL requirements , including necessary RSL agreements , have been executed before engagement with LS&Co. product developments and productions.

• Technical Representative shall be able to demonstrate that all chemicals being brought on-site are accompanied by relevant documentation such as Chemical Information Log (CIL), Safety Data Sheet (SDS), Technical Data Sheet (TDS), etc., and these documents are validated for LS&Co. RSL requirements before purchase.

- The Technical Representative shall manage all aspects of chemical usage in the factory, including, but not limited to, the following:
  - Collection and analysis of chemicals, materials, and product data
  - Purchase only Materials, Chemicals, and Other Goods which comply with LS&Co.'s RSL requirements
  - Product testing and Chemical risk management as per LS&Co.RSL requirements
  - Be sure that employees are familiar with the precautions set out in the SDSs or TDSs
  - Understand all the chemical inputs to your production by requesting fully completed Chemical Information Logs (see Section 6, F) from your chemical Sources
  - Contact all your Materials, Chemicals, and Other Goods Suppliers and Sources to ensure their understanding of LS&Co.'s RSL and their commitment to supplying only RSL compliant chemicals and materials
  - Conduct internal staff training for RSL
  - Document and retain all dyeing, coating, finishing, printing formulations
  - Follow the parameters as listed on the latest TDSs and document all chemicals use and process control variables (e.g., pH, curing temperatures , durations , liquor quantities , and ratios) as used in production with retention of the documentation.
  - Assess the chemical product safety risk that may encounter
  - Implement the processes as defined in the chemical recipes or their equivalents
  - Record-keeping

APPENDIX 5

- Ensure that you and your Suppliers and Sources comply with all applicable legal requirements of the countries and other jurisdictions in which you/they do business, as well as all countries to which they ship any Materials, Chemicals and Other Goods which may be used with respect to LS&Co. labeled and/or distributed products.

- Management of chemical/LS&Co. product-specific feedback and/or complaints from customers and markets.

- Prepare and submit necessary RSL performance scorecards/summary report from time to time as requested by LS&Co. Product safety.

SPECIFIC REQUIREMENTS

- Ensure that all substance-related activities are centralized through the Technical Representative

- Establish an approved chemical supplier list and an approved chemicals list and ensure that all chemical purchases are made only from these lists

- Communication of LS&Co.'s Restricted Substances List (RSL) with all raw material and chemical/auxiliary suppliers

- Collect and maintain all other necessary chemical-related documents such as Chemical inventory, Safety data sheets (SDS), Technical Data Sheets (TDS), Recipes, Chemical Information Log sheets (CIL), Compliance Agreements, Analysis Certificates, and Product test reports from relevant personnel, and establish an efficient archiving system for documents

- Analyze SDS of all facility chemicals, focusing on occupational health and safety and environmental protection and taking necessary actions (e.g. create Workplace Hazardous Chemicals Map for the factory; establish Personal Protective Equipment protocol (PPE), etc.) based on information from SDS

- Approve the purchase of any new chemical or raw material before implementation in bulk (e.g. samples)

- Provide training for all stakeholders regarding the chemical management system, e.g., purchasing department, maintenance department, production, warehousing, waste personnel, etc.

- Train workers regarding risks from hazardous chemicals and safe usage techniques. Approve the use of chemicals used by contractors in conducting temporary work on-site. Provide support to purchasing personnel regarding the acquisition of chemicals and raw materials.

- Demonstrate that the LS&Co. RSL Usage ban and priority chemical policy requirements met during any and all stages of product manufacturing.

- Establish factory sampling programs for testing releases into all media - such as raw materials, chemicals, fabrics, garments, and sundry components as per LS&Co. standards.

APPENDIX - 6 - PRODUCT TESTING AND DATA MANAGEMENT

Product Testing:

LS&Co. currently maintains various product testing programs to validate RSL compliance. Notwithstanding LS&Co.'s testing programs, the Suppliers and Sources are fully responsible for obtaining all necessary knowledge and information required to understand and execute business processes that ensure RSL compliance . The Suppliers and Sources are also responsible for performing analytical testing on Materials, Chemicals and Other Goods to verify their compliance to all RSL requirements. The Suppliers and Sources must test Materials, Chemicals and Other Goods only at LS&Co. approved laboratories (Appendix 9).

As a general matter, Materials, Chemicals and Other Goods should be tested as indicated in the following tables.

Table A provides general testing guidance based on Material type.

Table B provides general testing guidance based on Dye and Finish type.

Table C provides general testing guidance for Print type.

Table D provides general testing guidance for Denim type.

Table E provides general testing guidance for Leather type.

Table F provides general testing guidance for Miscellaneous materials.

Table G provides general testing guidance for Packaging material.

The Testing Matrix uses the following color codes:

Red = Level 1 Higher risk. Testing required.
Orange = Level 2 Lower risk. Testing recommended and may be required at LS&CO. Product Safety team discretion.
Blank = Lowest risk. Not anticipated in material.

Given the risk that a particular Source or Supplier might use an unanticipated ingredient in the formulation , manufacture or processing of any given type of m aterials , Chemicals and Other Goods, these tables necessarily suggest, but do not definitively prescribe the tests necessary to ensure compliance with the RSL. It is the Source's and Supplier's absolute and non-delegable duty to ensure compliance with the RSL. Moreover, LS&Co . may at any time require additional testing , including Annual Random RSL testing to validate compliance with the RSL. All costs associated with testing are the responsibility of the Suppliers and Sources. When using recycled or re-used material, the supplier has to ensure consistence of conformity within all used material batches. Additional assessment and testing may be needed.

TABLE A -RSL TESTING GUIDE BASED ON MATERIAL TYPE

Base Materials	Natural textile	Synthetic textile	Natural and Synthetic blends	Natural leather	Artificial leather	Recycled(Cotton)	Recycled polyester fiber from PET	Recycled leather	Natural Materials[1]	PU and TPU coated leather,including PU foams	Other foams, plastics & Polymers	Non-metallic embellishment and trims	Metallic embellishment and trims	Jewelry and others such as Porcelain, Ceramic, Glass, Crystal, Etc.	Glue and adhesives	Feathers and down
Acetophenone and 2-Phenyl-2-Propanol											2	2				
Acidic and Alkaline Substances (pH)																
Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs)																
Azo-amines and Aryl Amine salts					3				3	3						3
Bisphenols												4				
Chlorinated Paraffins												5				
Chlorophenols																
Chlorinated Benzenes and Toluenes												6				
Cyclosiloxanes											14					
Dimethylfumarate (DMFu)																
Dyes, Forbidden and Disperse																
Dyes, Navy Blue																
Brominated and Organophosphorus Substances	7															
Fluorinated Greenhouse Gases																
Formaldehyde									8							
Heavy Metals, Chromium VI	9	10										11				
Heavy Metals, Extractable													12			
Heavy Metals, Nickel Release														13		

FOOT NOTES:

1. Material derived from animals or plants that have undergone very little modification. Includes horn, bone, cork, wood, paper, and straw. Excludes natural fibers, natural leather, feathers, down, and metals.
2. Test on EVA type materials only
3. Test on dyed and colored materials
4. Test on spandex, elastane, recycled paper, plastic components and polycarbonates, including polyester buttons
5. Testing is applicable for natural leather, Rubber and plastics materials
6. Testing is applicable for synthetic textile trims and embellishments
7. Test if Flame Retardant use or contamination is suspected or if TPP use suspected in PU, TPU, or other polymeric materials
8. Test on Wood, Paper, and Straw materials.
9. Testing is applicable for wool, polyamide and silk dyed with use of metal complexes acid dyes
10. Test if extractable Chrome above 1 ppm
11. Testing is applicable for leather materials, dyed polyamide buttons
12. Copper is exempt from restriction limits in Metal parts
13. Applicable for metal components with direct and prolonged skin contact
14. Test on silicone polymers / silicone rubbers only

Base Materials	Natural textile	Synthetic textile	Natural and Synthetic blends	Natural leather	Artificial leather	Recycled(Cotton)	Recycled polyester fiber from PET	Recycled leather	Natural Materials	PU and TPU coated leather,including PU foams	Other foams, plastics & Polymers	Non-metallic embellishment and trims	Metallic embellishment and trims	Jewelry and others such as Porcelain, Ceramic, Glass, Crystal, Etc.	Glue and adhesives	Feathers and down
Heavy Metals, Total	15		15											16		
Monomers, Styrene & Vinyl Chloride					17							17				
N-Nitrosamines											18	18				
Organotin Compounds												19				
Ortho-phenylphenol (OPP)												20				
Ozone-depleting Substances																
PFASs (Perfluoroalkyl / Polyfluoroalkyl Substances)	21															
Total Organic Fluorine	22															
Pesticides, Agricultural																
Phthalates												23	24			
Polycyclic Aromatic Hydrocarbons (PAHs)						25	25					26				
Quinoline																
Solvents / Residuals, DMFa															27	
Solvents / Residuals, DMAC and NMP																
Solvents / Residuals, Formamide and vinyl acetate											28				30	
UV Absorbers / Stabilizers																
Volatile organic solvents																
Di isocyanates					29											

FOOT NOTES:

15. Test on plant-based fibers; N/A for animal-based fibers
16. Test Cadmium and Lead only: Crystal is exempt for Lead
17. Test on PVC, pliable plastic materials
18. Test on Rubber materials only
19. Testing is applicable for plastics, synthetic leather (like PU), rubber, adhesives, paper patch
20. Testing is applicable for natural leather and paper patch
21. Testing is applicable only for durable water repellent (DWR) / stain management finishes
22. Testing is applicable only for reactive dye types, durable water repellent (DWR) / stain management finishes
23. Testing is applicable for plastics, synthetic leather (like PU), surface coating, paper patch and lacquered embellishments and trims
24. Testing is applicable for all lacquered and surface coated metallic embellishments and trims
25. Testing is applicable for post-consumer recycled from unknown or inconsistent sources.
26. Test on Rubber or black Polymeric materials only
27. Test on PU-based materials
28. Test on EVA, PEVA, PVA type materials only
29. Test if PU coating applied
30. Test for vinyl acetate only on glues/adhesives

TABLE B - RSL TESTING GUIDE BASED ON DYE & FINISH TYPE

Base Materials	Plain Dyed, Spray Dyed or Tie Dyed Textile Products (no finish)								Finishes applied to dyed textiles (combine these risks with the base plain dyed risks)									
Process	Reactive Dyed Cotton, Viscose, Lyocell, Linen, Hemp	Vat/Sulphur Dyed Cotton, Viscose, Lyocell, Linen, Hemp	Direct Dyed Cotton, Viscose, Lyocell, Linen, Hemp	Natural Dyed Cotton, Viscose, Lyocell, Linen, Hemp	Disperse Dyed Polyester	Acid Dyed Nylon	Acid Dyed Wool	Basic Dyed Acrylic	Pigment Coated (any fibre)	Clear Coated (any fibre)	Softener General (any fibre)	Silicone Softener (any fibre)	Durable Water Repellent (any fibre)	Soil / Stain Repellent (any fibre)	Easy Care Resin (Cotton / Linen)	Anti-pill (Viscose)	Moisture Wicking	Mock Leather (PU Coated Polyester / Nylon Textile)
Acetophenone and 2-Phenyl-2-Propanol																		
Acidic and Alkaline Substances (pH)																		
Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs)																		
Azo-amines and Aryl Amine salts																		
Bisphenols						1												1
Chlorinated Paraffins																		
Chlorophenols																		
Chlorinated Benzenes and Toluenes																		
Dimethylfumarate (DMFu)																		2
Dyes, Forbidden and Disperse	3	3	3			3	3	3										
Dyes, Navy Blue																		
Brominated and Organophosphorus Substances																		4
Cyclosiloxanes																		
Formaldehyde																		
Heavy Metals, Chromium VI																		
Heavy Metals, Extractable																		
Heavy Metals, Nickel Release																		
Heavy Metals, Total																		
Monomers, Styrene & Vinyl Chloride									5	5								5
N-Nitrosamines																		
Organotin Compounds																		
Ortho-phenylphenol (OPP)																		
Ozone-depleting Substances																		
PFASs (Perfluoroalkyl / Polyfluoroalkyl Substances)													6	6				6
Total Organic Fluorine													6	6				
Pesticides, Agricultural																		
Phthalates									7	7								7
Polycyclic Aromatic Hydrocarbons (PAHs)									8									
Quinoline																		
Solvents / Residuals, DMFa																		
Solvents / Residuals, DMAC and NMP																		
Solvents / Residuals, Formamide and vinyl acetate																		
UV Absorbers / Stabilizers																		
Volatile organic solvents																		
Di isocyanates									9	9			9	9				9

1. Test BPS on Nylon materials
2. Test for DMFu in mock leather
3. Test for relevant forbidden dyes classes only
4. Test if FR contamination is suspected or if TPP use suspected in PU, TPU, or other polymeric materials
5. Test if PVC use is suspected
6. Test if PFAS contamination is suspected
7. Test if phthalate contamination is suspected
8. Test if black pigment
9. If PU types are used

TABLE C - RSL TESTING GUIDE BASED ON PRINT TYPE

Base Materials	Textile Products Printed with Dyes - no finish (**Combine** with plain dyed base fabric risks if applied on a dyed ground)					Print Techniques (**Combine** with plain dyed base fabric risks if applied on a dyed ground)												Finishes applied to printed textiles (**Combine** these risks with the print and plain dyed base fabric risks)								
Process	Reactive Printed Cotton, Viscose, Lyocell, Linen, Hemp	Disperse Printed Polyester	Acid Printed Nylon	Acid Printed Wool	Sublimation Print on Polyester	Pigment Print (any fibre)	Plastisol Print (any fibre)	Glitter Print (any fibre)	Foil Print (any fibre)	Puff Print ((any fibre)	Flock Print (any fibre)	Heat Transfer - pre-printed films (any fibre)	Reflective Print (any fibre)	Beads (any fibre)	Glow in the dark (any fibre)	Gel Print (any fibre)	Silicone Print (any fibre)	Pigment Coated (any fibre)	Clear Coated (any fibre)	Softener General (any fibre)	Silicone Softener (any fibre)	Durable Water Repellent (any fibre)	Soil / Stain Repellent (any fibre)	Easy Care Resin (Cotton / Linen)	Anti-pill (Viscose)	Moisture Wicking
Acetophenone and 2-Phenyl-2-Propanol																										
Acidic and Alkaline Substances (pH)																										
Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs)																										
Azo-amines and Aryl Amine salts																1	1									
Bisphenols			2																							
Chlorinated Paraffins																										
Chlorophenols																										
Chlorinated Benzenes and Toluenes																										
Dimethylfumarate (DMFu)																										
Dyes, Forbidden and Disperse	3		3	3																						
Dyes, Navy Blue																										
Brominated and Organophosphorus Substances																										
Fluorinated Greenhouse Gases																										
Formaldehyde																										
Heavy Metals, Chromium VI																										
Heavy Metals, Extractable																										
Heavy Metals, Nickel Release																										
Heavy Metals, Total																										
Monomers, Styrene & Vinyl Chloride						4	4					4						4	4							
N-Nitrosamines																										
Organotin Compounds																										
Ortho-phenylphenol (OPP)																										
Ozone-depleting Substances																										
PFASs (Perfluoroalkyl / Polyfluoroalkyl Substances)																						5	5			
Pesticides, Agricultural																										
Phthalates																										
Polycyclic Aromatic Hydrocarbons (PAHs)						6	6	6	6	6	6	6	6	6	6	6	6	6								
Quinoline																										
Solvents / Residuals, DMFa								7	7	7	7	7	7	7	7											
Solvents / Residuals, DMAC and NMP																										
Solvents / Residuals, Formamide and vinyl acetate																										
UV Absorbers / Stabilizers																										
Volatile organic solvents																										
Cyclosiloxanes																										

1 Test if pigmented
2 Test BPS on Nylon materials
3 Test for relevant forbidden dyes classes only

4 Test if PVC use is suspected
5 Test if PFAS contamination is suspected
6 Level 1 if black / otherwise level2

7 If PU type inks are used

TABLE D - RSL TESTING GUIDE BASED ON DENIM MATERIAL

Base Materials	Washed Denim	Additional Denim Processes (followed by laundry wash)									
Process	Indigo Dyed cotton, lyocell	Sulphur top / bottom	Overdye/ Tint	Softener	3D Resin	Dipping / Sponging	PP Spray	Sand Blasting	Hand Scraping	Ozone	Laser
Acetophenone and 2-Phenyl-2-Propanol							1	2	3	1	3
Acidic and Alkaline Substances (pH)						1					
Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs)						1					
Azo-amines and Aryl Amine salts											
Bisphenols											
Chlorinated Paraffins											
Chlorophenols											
Chlorinated Benzenes and Toluenes											
Dimethylfumarate (DMFu)											
Dyes, Forbidden and Disperse											
Dyes, Navy Blue											
Brominated and Organophophorus Substances											
Fluorinated Greenhouse Gases											
Formaldehyde											
Heavy Metals, Chromium VI											
Heavy Metals, Extractable											
Heavy Metals, Nickel Release											
Heavy Metals, Total											
Monomers, Styrene & Vinyl Chloride											
N-Nitrosamines											
Organotin Compounds											
Ortho-phenylphenol (OPP)											
Ozone-depleting Substances											
PFASs (Perfluoroalkyl / Polyfluoroalkyl Substances)											
Pesticides, Agricultural											
Phthalates											
Polycyclic Aromatic Hydrocarbons (PAHs)											
Quinoline											
Solvents / Residuals, DMFa											
Solvents / Residuals, DMAC and NMP											
Solvents / Residuals, Formamide and vinyl acetate											
UV Absorbers / Stabilizers											
Volatile organic solvents											
Di isocyanates					4						

Foot Notes:

1. Ensure no residues / ensure workers are not exposed to process chemicals
2. Process in not permitted
3. Ensure workers are not exposed to dusts or fumes resulting form the process
4. PU types

TABLE E - RSL TESTING GUIDE BASED ON LEATHER MATERIAL

Base Materials	Dyed Leather		Coated / Printed leather		
Process	Chrome Tanned Leather	Veg Tanned Leather	Pigment Coated	Clear Coated	Pigment Print
Acetophenone and 2-Phenyl-2-Propanol					
Acidic and Alkaline Substances (pH)					
Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs)					
Azo-amines and Aryl Amine salts					
Bisphenols					
Chlorinated Paraffins					
Chlorophenols					
Chlorinated Benzenes and Toluenes					
Dimethylfumarate (DMFu)					
Dyes, Forbidden and Disperse	1	1			
Dyes, Navy Blue					
Brominated and Organophosphorus Substances					
Fluorinated Greenhouse Gases					
Formaldehyde					
Heavy Metals, Chromium VI					
Heavy Metals, Extractable					
Heavy Metals, Nickel Release					
Heavy Metals, Total					
Monomers, Styrene & Vinyl Chloride			2	2	2
N-Nitrosamines					
Organotin Compounds					
Ortho-phenylphenol (OPP)					
Ozone-depleting Substances					
PFASs (Perfluoroalkyl / Polyfluoroalkyl Substances)			3	3	
Pesticides, Agricultural					
Phthalates			4	4	4
Polycyclic Aromatic Hydrocarbons (PAHs)					
Quinoline					
Solvents / Residuals, DMFa					
Solvents / Residuals, DMAC and NMP					
Solvents / Residuals, Formamide and vinyl acetate					
UV Absorbers / Stabilizers					
Volatile organic solvents					
Di isocyanates			5	5	5

1. Test for relevant forbidden dyes classes only
2. Test if PVC use is suspected
3. Test if PFAS contamination is suspected
4. Test if phthalate contamination is suspected
5. If PU coatings are used

TABLE F - RSL TESTING GUIDE BASED ON MISCELLANEOUS MATERIAL

Base Materials	Metal Yarns	Metallised Yarn	Metals	Polymers / Plastics				Rubber	Elastics	Foams	Polyfills	Adhesives
			Any metal component	PU/TPU	ABS	EVA	Polycarbonate		Rubber yarns			
Acetophenone and 2-Phenyl-2-Propanol												
Acidic and Alkaline Substances (pH)												
Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs)												
Azo-amines and Aryl Amine salts												
Bisphenols												
Chlorinated Paraffins												
Chlorophenols												
Chlorinated Benzenes and Toluenes												
Dimethylfumarate (DMFu)												
Dyes, Forbidden and Disperse												
Dyes, Navy Blue												
Brominated and Organophosphorus Substances												
Fluorinated Greenhouse Gases												
Formaldehyde												
Heavy Metals, Chromium VI												
Heavy Metals, Extractable												
Heavy Metals, Nickel Release												
Heavy Metals, Total												
Monomers, Styrene & Vinyl Chloride								1				
N-Nitrosamines												
Organotin Compounds										2		
Ortho-phenylphenol (OPP)												
Ozone-depleting Substances												
PFASs (Perfluoroalkyl / Polyfluoroalkyl Substances)												
Pesticides, Agricultural												
Phthalates				3	3	3	3	3	3	3		
Polycyclic Aromatic Hydrocarbons (PAHs)				4		4		4	4	4		
Quinoline												
Solvents / Residuals, DMFa												
Solvents / Residuals, DMAC and NMP												
Solvents / Residuals, Formamide and vinyl acetate						5						6
UV Absorbers / Stabilizers												
Volatile organic solvents												
Di isocyanates										2		
Cyclosiloxanes								7				

1. Styrene / Butadiene Rubbers
2. PU types
3. Test if phthalate contamination is suspected
4. Level 1 if black / otherwise level2
5. Apply to EVA, PEVA, PVA
6. Test vinyl acetate only
7. For silicone rubber only

TABLE G - RSL TESTING GUIDE BASED ON PACKAGING TYPE

Substances	Poly bags, Plastic clips/collar, foaming materials, Hangers and other protective coverings	Boxes/Cartons, gift boxes, sales and other transport packaging	Hang Tags, Price tags and UPC tags	Scotch Tapes, Adhesives, Stickers and Labels	Test Remarks
CADMIUM (maximum)					Applicable for All
LEAD – TOTAL (maximum)					Applicable for All
MERCURY (maximum)					Applicable for All
CHROMIUM - HEXAVALENT (maximum)					Applicable for All
PVC					Applicable only for plastic materials
DIMETHYL FUMARATE (maximum)					Applicable for desiccant sachets, pads and Leather
PHTHALATES					Applicable for Plastic/TPU materials, Print and Coating
PFAS					Applicable for water repellent/stain management coatings
Azo-amines and Arylamine Salts					Applicable for Colored, Printed materials
Formaldehyde					Applicable for all
APEOs/APs					Applicable for all non-metal items
BHT					Applicable for All polyethylene and polypropylene films and polybags
ORGANOTINS					plastics/rubber, PU, Foil Print, adhesives
Bisphenols (BPA, BPB, BPS, BPF, BPAF)					recycled paper, recycled polybags, polycarbonates, recycled plastic cases

APPENDIX 7 : DEFINITIONS

ACCESSORIES - Products other than typical pants and shirts. Accessories can include both apparel and non-apparel products such as belts, caps, shoes, handbags, gloves, socks, scarves, eyewear, watches, home textile products and wallets. The examples covered here are neither exhaustive nor all inclusive; they simply provide examples of products defined as accessories. All accessories are covered by LS&Co.'s RSL.

ALLOWABLE TRACE (TR) - The Allowable Trace is identified by the TR designation in the Limit Value column. The Allowable Trace [amount] represents the [permitted unavoidable trace presence] amount of a substance that has been added unintentionally or unavoidably to a Materials, Chemicals and Other Goods, but is nonetheless [is] allowed to be [found] detected in [on the garment] the Materials, Chemicals and Other Goods when otherwise the substance has been prohibited from use.

CHEMICAL ABSTRACT SERVICE (CAS) NUMBER - A unique number that identifies a particular chemical structure. While there may be various synonyms for a substance using different naming conventions, there is only one CAS number. Mixtures do not have CAS numbers; only individual chemical components have CAS numbers. When there is doubt about the chemical name used in the RSL, always check the CAS number.

CHILDREN'S PRODUCTS - An article which is designed for or intended primarily for use by children aged 12 years and under. All Girls size 0-16 and Boys size 0-20 are presumptively included within this definition of children's products.

CONCENTRATION LIMIT - The concentration limit is set for each substance as measured in each of the Materials, Chemicals and Other Goods supplied to LS&Co. and in the final product. It represents the maximum allowable amount of the respective substance which can be found in a RSL compliant product. The concentration limit is shown in the Limit Value column. The limit is specified as the amount of the substance on the amount of substrate, by weight (e.g., milligrams substance per kilogram of product [mg/kg]).

Concentration limits are applicable to any single part of a garment or accessory, not an average over the whole product. If the limit is given for a group of substances with various CAS numbers, the concentration should be calculated on basic substance of the group generally given with its name in the name column. For example, with regard to methylene diphenyl diisocyanates (with isomers, homologs, oligomers and polymers), all MDI type is ocyanates must be measured and calculated to the monomer 4,4'-methylenediphenyl diisocyanate). Another example is the metals present in the apparels in the form of several salts which are measured together and must be calculated as the elemental metal content. On the other hand, the analytical method sometimes measures a substance containing many chemicals.

DETECTION LIMIT - Specifies the test method detection sensitivity that a laboratory must be able to achieve when measuring the substance in the product.

LS&Co. PRODUCT(S) - LS&Co. final products covered by the RSL include all LS&Co. branded products, including Levi's®, Dockers®, DENIZEN®, Signature and Beyond Yoga by Levi Strauss & CO.™ products as well as LS&Co. distributed products. LS&Co. Products include those sourced directly by LS&Co., products sourced by an agent, and those designed and sourced by our licensee partners

METALLIC EMBELISHMENTS AND TRIMS - Items that are permanently attached to the garment or footwear and may include zippers, rivets, buttons, and other metal hardware like Buckles, Hook& Bar, Studs, D-Rings, Eyelets /Grommets, Toggles, Aglets/Tipping etc.

NON-APPAREL PRODUCTS - Products made from materials other than fabric or leather. Some products included in non-apparel products are mobile phones, home furnishings, ties, hats, watches, jewelry, eyewear and electronics. All other non-apparel products are covered by LS&Co.'s RSL.

NON-METALIC EMBELISHMENTS AND TRIMS - Non- Metal Items that are permanently attached to the garment or footwear and may include zippers, Pocketing, Lining, Labels, Badges, Patches, Care labels, Tapes, Visible trims, Drawstrings, Hook and Loop fasteners, Embroidery, Quilting, Appliqué, Patchwork, Lacework and other trims

POLYVINYL CHLORIDE (PVC) - Polyvinyl chloride, or PVC for short, is a hard plastic that may be found in packaging materials, flashers and screen printing. PVC is prohibited for use in packaging for all LS&Co. products. Alternatives to PVC packaging include polyurethane (PU), polyethylene (PE) and polyethylene terephthalate (PET). In addition, PVC screen printing, which utilizes phthalates, is prohibited for products.

FORMULATION - A mixture or solution composed of two or more substances.

REPORTING LIMIT (RL) – The lowest concentration the laboratory is allowed to report. Results below reporting limits are affected by higher measurement uncertain ies and reported as Not Detected.

SOURCE(S) - Business partners of Suppliers that provide Materials, Chemicals and Other Goods or other goods for direct or eventual use in fabricating, manufacturing or other processing of LS&Co. labeled and/or distributed apparel, non-apparel, footwear, accessories and other products.

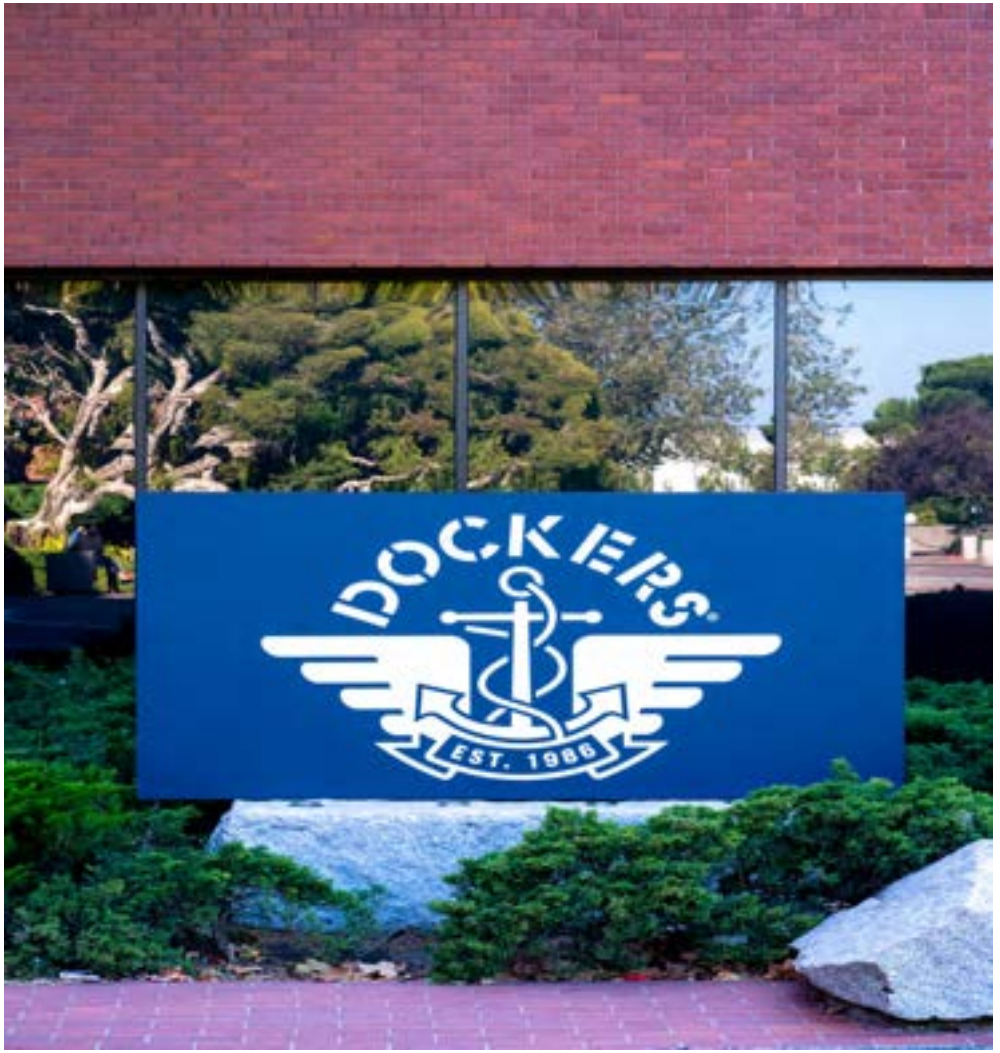
SUBSTANCE- A chemical element and its compounds in the natural state or obtained by any manufacturing process, including any additive necessary to preserve its stability and any impurity deriving from the process used, but excluding any solvent which may be separated without affecting the stability of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

SUNDRIES - Items that are permanently attached to the garment or footwear and may include zippers, rivets, buttons, care labels, name labels and tags.

SUPPLIER(S) - Include factories and other businesses, including licensees, that contract with LS&Co. to produce finished products, apparel, non-apparel, footwear, accessories and other products for LS&Co. Suppliers may also contract with Sources for Materials, Chemicals and Other Goods for direct or eventual use in fabricating, manufacturing or other processing of LS&Co. labeled and/or distributed apparel, non-apparel, footwear, accessories, and other products.

TECHNICAL REPRESENTATIVE (TR) - A factory nominated/appointed RSL point person to handle RSL activities as per LS&Co. RSL requirements (refer Appendix -5 for TR roles and responsibilities)

USAGE BAN - A prohibition of any use of the substance during any and all stages of product manufacturing. However, the RSL identifies an Allowable Trace ("TR") amount of the substance to be detected if caused by unintentional or unavoidable contamination.



APPENDIX 8: LS&Co. PRODUCT SAFETY CONTACT INFORMATION

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APPENDIX 9 - APPROVED LABORATORIES

Eurofins MTS	Scope of RSL Test	
	Full	Partial
Asia		
China- Hong Kong	X	
China- Shanghai	X	
China- Dongguan	X	
Taiwan		X
India - Tirupur	X	
India - Bangalore	X	
India - Gurgaon	X	
Bangladesh	X	
Cambodia		X
Vietnam	X	
Americas		
US– Norwood, MA		X

Global Contact for Eurofins MTS

Laboratory Name: Eurofins MTS Consumer Product Testing Hong Kong Ltd.

Name : Claire MODIANO
: Dilys Leung
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Technical Support:

Name : Dr. Charles Wong
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Telephone : +852 36041301

Bureau Veritas	Scope of RSL Test	
	Full	Partial
Asia		
China- Hong Kong	X	
China- Shanghai	X	
China- Panyu	X	
Taiwan		X
Korea		X
India - Banaglore		X
India - Noida		X
India - Tirurpur		X
Bangladesh-Dhaka		X
Bangladesh-Chittagong		X
Sri Lanka		X
Pakistan		X
Vietnam - HCM		X
Vietnam - Hanoi		X
Europe		
Germany		X
Turkey		X
Americas		
Mexico		X
Guatemala		X

Global Contact for Bureau Veritas

Laboratory Name : Bureau Veritas - Hong Kong

Name : Jeannie Leung
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Name : Ling Fan
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Laboratory Name: Bureau Veritas Bangalore - India

Name : VS Sudalai Muthu
E-mail : sudalaimuthu.vs@bureauveritas.com
Telephone : +91 80 40701651

Intertek	Scope of RSL Test	
	Full	Partial
Asia		
India– Bangalore		X
India– Gurgaon		X
India– Tirupur		X
Sri Lanka		X
Bangladesh– Dhaka		X
Bangladesh– Chittagong		X
Pakistan		X
Mauritius		X
China – Shanghai	X	
China– Guangzhou	X	
China - Xiamen		X
Hong Kong	X	
Cambodia		X
Vietnam - HCM		X
Vietnam - Hanoi		X
Europe		
Turkey	X	
Egypt		X
Americas		
US – Arlington Heights		X
Guatemala		X

Global Contact for Intertek

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Laboratory Name : Intertek - Hong Kong

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APPENDIX 9 - APPROVED LABORATORIES

Tti Testing Laboratories	Scope of RSL Test	
	Full	Partial
Asia		
Pakistan	X	

Global Contact for Tti

Textitle Testing International (Tti Testing Laboratories) - Pakistan

Name : Mr. Hamed K. Lateef
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Name : Mr. Shahid Ali
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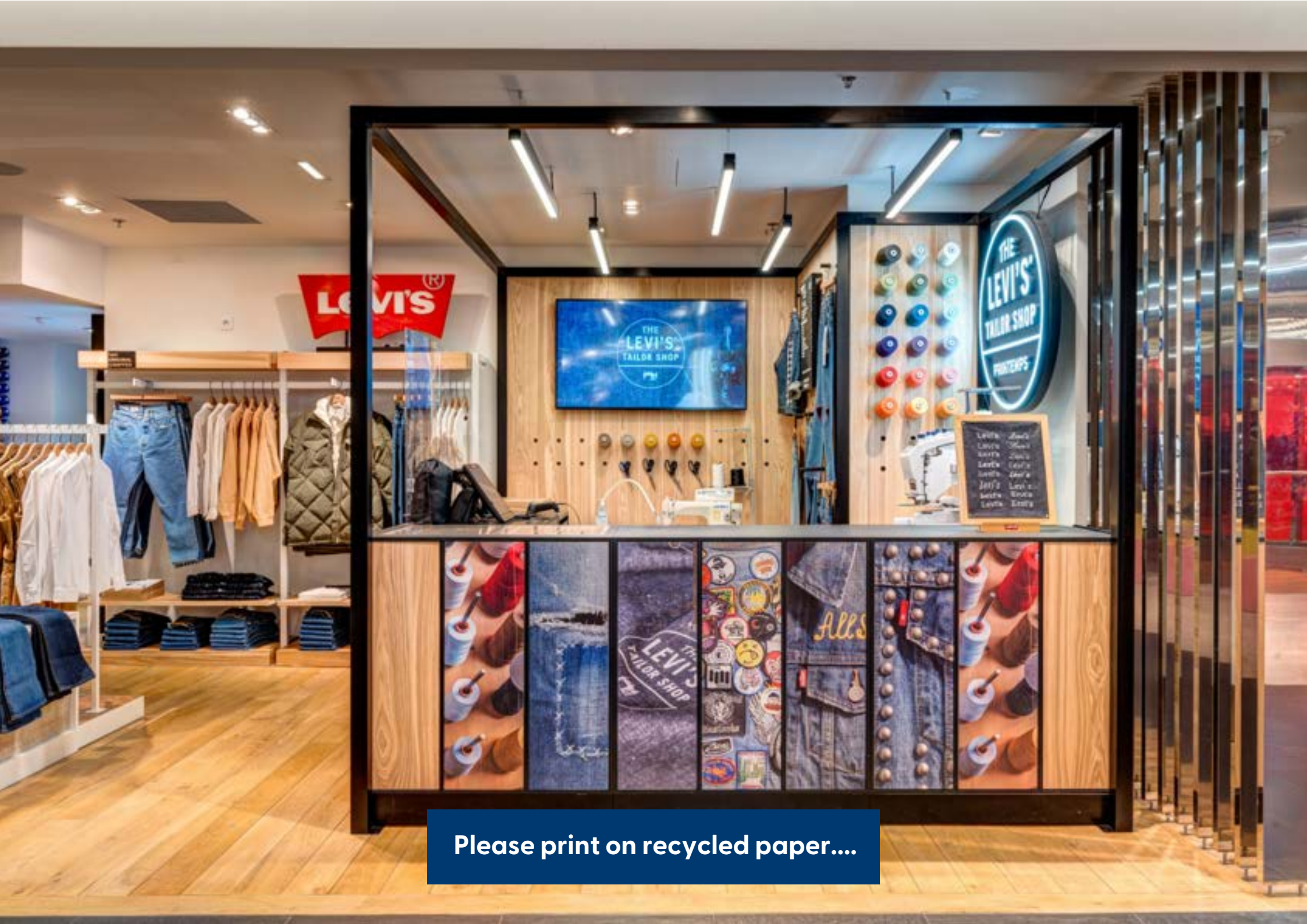
Telephone : +92 300 4491386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