

File No	SHEIN-QMS-BS-0107	Name	Manufacturing Restricted Substances List (MRSList)	Version	B1
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Manufacturing Restricted Substances List (MRSList)

【B1】

Basic Information	
File No.	SHEIN-QMS-BS-0107
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Approved by the Chairman of Quality Committee	Maggie Gu Date: 2023-12-01

Edited Record				
Version	Date	Revised By	Approved By	Remarks
B0	2023-10-31	Peggy Mo	Nil Yan	Initial Version
B1	2023-12-01	Peggy Mo	Maggie Gu	Modified Version

This standard is executed in both Chinese and English and both versions of this standard shall have equal validity. In case of any discrepancy between the English version and the Chinese version, the Chinese version shall prevail.

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1. Background and Purpose

1.1 Background

SHEIN focuses on consumer safety, as well as protecting workers, local communities, and the environment from potential harmful chemicals. MRSList is a list of prohibited intentionally used chemical substances compiled by ZDHC, applied for chemical formulations such as dyes, additives, and finishing agents used in the textile, clothing, and footwear industries. It helps to protect workers, local communities, and the environment from potential harmful chemical substances. SHEIN agrees with ZDHC's MRSList and refers to it to prepare the standard of *Manufacturing Restricted Substance List (MRSList)*, advocating for all suppliers to comply with this standard.

1.2 Purpose

In order to improve the quality management system and quality standard system of SHEIN Group, and to improve the restricted substance standards for chemical formulas used in the production process, we have formulated the *Manufacturing Restricted Substance List (MRSList)*.

In order to unify the relevant standards for chemical formulas processed in the textile, clothing, and footwear industries of SHEIN Group and reduce the operational risks of SHEIN Group's related products, this standard is specially formulated.

2. Scope

This standard applies to all chemical formulas used by textile, clothing, and footwear suppliers of various brands and channels in the production process under the self operated business model of SHEIN Group. Chemical formulas include but are not limited to solvents, cleaning agents, adhesives, paints, inks, cleaning agents, dyes, colorants, and additives, coatings, and finishing agents used in raw materials, production, wet treatment, and maintenance processes.

Note: This standard is in line with the requirements for finished products in the *SHEIN-QMS-BS-0100 SHEIN RSL Chemical Limited Substance Management Specification*. All formulas used in the production process must meet the requirements of this standard, and the finished product must also meet the requirements of *SHEIN-QMS-BS-0100 SHEIN RSL Chemical Limited Substance Management Specification*.

3. Terms and definitions

The following definitions apply to this standard:

ZDHC: Zero Discharge of Hazardous Chemicals, also known as Zero Discharge of Hazardous Chemicals, is committed to eliminating hazardous chemicals and implementing sustainable chemicals in the fields of leather, textiles, and synthetic materials.

MRSList: Manufacturing Restricted Substances List.

Formula: refers to the chemical formulas used in the textile, clothing, and footwear industries, including solvents, cleaning agents, adhesives, paints, inks, cleaning agents, dyes, colorants, additives, coatings, and finishing agents.

Natural dyes: Refers to dyes obtained from plants, animals, or mineral resources that are not artificially synthesized and have not undergone any chemical processing

Polymer (R&F&A): polymer (rubber, foam, adhesive)

GC/MS: Gas chromatography/mass spectrometry

ICP: Inductively Coupled Plasma

LC/MS: Liquid chromatography/mass spectrometry

OES: Direct Reading Spectrometer

SDS: Safety Data Sheet is a comprehensive explanatory document that includes 16 items such as chemical composition information, physical and chemical parameters, ignition and explosion performance, toxicity, environmental hazards, as well as safe use methods, storage conditions, leakage emergency response, and transportation regulatory requirements.

4. Requirements of MRSList

In order to better protect workers, local communities, and the environment from potential harmful chemical substances, we advocate and encourage suppliers to:

- 1) Intentional use of silica (CAS#14464-46-1) is prohibited in sandblasting processes, as silica dust can lead to kidney disease or chronic obstructive pulmonary disease. In addition, long-term inhalation of silica dust can also lead to fatal silicosis. OSHA (Occupational Health and Safety Administration of the United States) has

listed many silica alternatives that can be used for sandblasting materials, including alumina, baking soda, coal slag, copper slag, and corn cob particles. We encourage suppliers to actively use safer alternatives;

2) All chemical formulas used in the production process follow Table 1-4 and actively identify and analyze potential restricted substances;

3) Use the SDS safety data sheet to record and confirm that all formulations contain restricted substances that meet the limit requirements listed in Table 5;

4) If necessary, conduct testing to confirm that all formulas meet the limit requirements listed in Table 5;

5) When the supplier or formula has a certificate issued by ZDHC, it is deemed that the supplier or formula fully meets the requirements of this standard;

6) If there is a conflict between this standard and the latest version of ZDHC MRSI, the requirements of the latest version of ZDHC MRSI shall prevail.

5. Instructions and content of MRSI

MRSI consists of a total of 5 tables, among which Tables 1 to 4 are MRSI risk assessment tables, which are further divided into Table 1- Textile MRSI based on the type of material Risk Assessment Form, Table 2- Leather MRSI Risk Assessment Form, Table 3- Synthetic Material MRSI Risk Assessment Form, and Table 4- Polymer MRSI Risk Assessment Form.

Determine the potential risks of restricted substances based on different materials and chemical formulations used in different stages, and then use Table 5-MRSI find the corresponding limit values for the restricted substances in the limit table, and ultimately determine whether the formula meets the requirements of MRSI.

In Tables 1 to 4:

X indicates that the substance has a high risk and is recommended for testing;

(X) Indicates that there is a risk of this substance, and the supplier can test it as needed.

Note: If the formula is not listed in Tables 1 to 4, professional personnel from the accredited laboratory in Part 6 can assist in determining the potential risk of restricted substances and determine the applicable testing items.

In Table 5, the testing method is the preferred recommended testing method, while SHEIN acknowledges other effective internal tests from the accredited laboratory in Part 6.

The specific content of Tables 1 to 5 is as follows:

Chemical formulation type															UV Absorbers
1.1 Auxiliaries and finishing agents for fibres and yarns															Thiourea
1.1.1 Spinning solution additives															Quinoline
1.1.2 Spinning additives															Salt
1.1.3 Spinning bath additives															Perboric Acid, Sodium
1.1.4 Preparation agents															ADCA
1.1.5 Lubricants															Borate, zinc salt
1.1.6 Coning oils, warping and twisting oils															BPA
1.1.7 Conditioning and stabilizing agents															ADCA
1.1.8 Other															ADCA
1.2 Pretreatment agents															UV Absorbers
1.2.1 Fibre protecting agents in pretreatment															Thiourea
1.2.2 Kierboiling/Scouring auxiliaries															Quinoline
1.2.3 Bleaching auxiliaries															Salt
1.2.4 Mercerising and causticizing auxiliaries															Perboric Acid, Sodium
1.2.5 Carbonizing assistants															ADCA
1.2.6 Sizing agents and sizing additives															UV Absorbers
1.2.7 Desizing agents															Thiourea
1.2.8 Hydrophilizing agents															Quinoline
1.2.9 Enzymes															Salt
1.2.10 Sequestering Agents															Perboric Acid, Sodium
1.2.11 Stabilizers															ADCA
1.2.12 Other pre-treatment auxiliaries															UV Absorbers
AP&APEO															UV Absorbers

	Chemical formulation type	UV Absorbers
		Thiourea
		Quinoline
		Salt
		Perboric Acid, Sodium
		Cyclic Siloxanes
		Borate, zinc salt
		(Free) Aniline
		ethanol (AEEA)
		2-(2-Aminoethyl)amino
		BPAs
		ADCA
		PAHs
		Phthalates
		PFAS
		Total Heavy Metals
		from Azo-colourants)
		Amines (Cleavable
		Restricted Aromatic
1.3	Textile auxiliaries for dyeing and printing	
1.3.1	Dyestuff solubilizing and hydrotropic agents	X X
1.3.2	Dispersing agents and protective colloids	X X
1.3.3	Dyeing wetting agents, deactivation agents	X X
1.3.4	Levelling agents	X (X)
1.3.5	Carriers	X X X X
1.3.6	Crease-preventing agents	X X
1.3.7	Dyestuffs protecting agents, boil down protecting agents	X X
1.3.8	Padding Auxiliaries	X
1.3.8.1	Anti-migration agents	X
1.3.8.2	Anti-frosting auxiliaries	X
1.3.8.3	Products increasing wet pick-up	X X
1.3.9	Fix accelerators for continuous dyeing and printing	X
1.3.10	Aftertreatment agents for fastness improvement	X X
1.3.11	Bonding agent(binders) for pigment dyeing and printing	X
1.3.12	Printing thickeners	X X
1.3.12.1	Native printing thickeners	X X
1.3.12.2	Synthetic printing thickeners	X X
1.3.13	Emulsifiers for gasoline printing(white spirit for oil-water emulsion printing)	X X
1.3.14	Agents to remove printing thickeners	X X
1.3.15	Printing and edge adhesives	X X X X
1.3.16	Oxidizing agents	X X
1.3.17	Reducing agents	X X
1.3.18	Discharging agents and discharging assistants	X X
1.3.19	Resistant agents	X X
1.3.20	Mordants	X X
1.3.21	Brightening and stripping agents	X X X X X X X X

Table 1 (Continued) Textile MRSL Risk Assessment Table

	Chemical formulation type	UV Absorbers
1.4	Finishing assistants	Thiourea
1.4.4	Catalysts for non-creasing and non-shrinking finishes	X
1.4.5	Handle imparting agents	X
1.4.6	Weighting agents	X
1.4.7	Filling and stiffening agents	X
1.4.8	Softening agents	X X
1.4.9	Anti-electrostatic agent	X
1.4.10	Water, stain, and oil repellents	X
1.4.11	Fluorine free water, stain and oil repellents	X
1.4.12	C6 based water, stain and oil repellents	X
1.4.13	C4 based water, stain and oil repellents	X
1.4.14	Crosslinking agent for water repellents and coatings	X
1.4.15	C6 based water, stain and oil repellents(Not to be used)	X
1.4.16	Soil release agents	X
1.4.17	Soil Repellents	X
1.4.18	Felting Agents	X
1.4.19	Anti-felting agents	X
1.4.20	Conditioning agents	X
1.4.21	Lustering agents	X
1.4.22	Delustering agents	X
1.4.23	Non-slip, ladder-proof and anti-snag agents	X
1.4.24	Flame retardants	X X
1.4.25	Anti-microbiotics	X
1.4.26	Anti-microbiotics for Finishing	X
1.4.27	Anti-microbiotics for Storage stability	X
1.4.28	Anti-microbiotics for polymers	X
1.4.29	Agents to protect textiles against damage caused by insects etc.	X
1.4.30	Agents and additives to promote bonding of fibres and threads	X X
	Total Heavy Metals	Borate, Zinc salt
	from Azo-co-colourants)	Cyclic Siloxanes
	Amines (Cleavable Restricted Aromatic)	Salt
	PAHs	Perboric Acid, Sodium
	PFAS	Quinoline
	Phthalates	ADCA
	(Free) Aniline	BPA
	ethanol (AEEA)	Thiourea
	2-(2-Aminoethyl)amino)	UV Absorbers

Table 1 (Continued) Textile MRSL Risk Assessment Table

		Table 1 (Continued) Textile MRSL Risk Assessment Table														
		Chemical formulation type														
		UV Absorbers	Thiourea	Quinoline	Salt	Polyacrylic Acid, Sodium	Cyclic Siloxanes	Borate, zinc salt	BPA	ADCAs	ethanol (AEEA)	2-(2-Aminoethylamino)	(Free) Aniline	Total Heavy Metals	From Azo-colourants)	
															Amides (Cleavable)	Restricted
															Aromatic	PAHs
1.4	Finishing assistants															
1.4.31	Coating agents as well as according additives	X	X		X			(X)	X	X	X	X	X	(X)		X
1.4.32	Laminating agents as well as according additives	X	X					(X)	(X)	X	(X)	X	X		X	
1.4.33	UV Protection		X			X		(X)		(X)					(X)	
1.4.34	Coating agents and additives	X	X		X			(X)	X	X	X	X	X	X	(X)	X
1.4.35	PU resin for solvent coating	X				X		(X)		X	X		X	X	(X)	X
1.4.36	Silicone resin for solvent Coating															X
1.4.37	Polymer based coating dispersions; water-based	X	X					(X)	(X)		(X)	X			X	
1.4.38	Crosslinker for solvent coating															
1.4.39	Accelerator for solvent coating															
1.4.40	Other finishing auxiliaries															
1.4.41	Finishing															
1.4.42	Storage Stability															
1.4.43	Fragrance Finish/ Microencapsulated Fragrance Finish	X							X	X	X					
1.4.44	Anti Pilling Agents	X							X						X	
1.5	Technical auxiliaries for multipurpose use in the textile industry															
1.5.1	Wetting agents	X	X					X	X	X	X				X	X
1.5.2	Anti-foaming agents (foam inhibitors)	X							X		X	X		X	(X)	X
1.5.3	Detergents, dispersing and emulsifying agents	X	X						X	X	X			X		X
1.5.4	Spotting agents	X	X						X	X	(X)					
1.5.5	Chelating agents	X	X						X	X	(X)				X	
1.5.6	Stabilizers	X	X					(X)		(X)						
1.6	Other Auxiliaries															
1.6.1	Dry Cleaning Detergents	X			X				X	X	X					
1.6.1.1	Drycleaning auxiliaries	X			X				X	X	X					
1.6.2	Prespotting Agents															
1.6.3	Defoaming Agents for solvent application	X							X	X	X	X	X	X	(X)	X
1.6.4	Resin Permanent	X							X	(X)		X	X	X		(X)
1.6.5	Resin Thermoplastic	X							X	(X)		X	X	X	X	(X)

Table 1 (Continued) Textile MRSL Risk Assessment Table

		Table 1 (Continued) Textile MRSL Risk Assessment Table														
	Chemical formulation type	UV Absorbers		Thiourea		Quinoline		Salt		Perboric Acid, Sodium		BPA		ADCAs		
		Borate, zinc salt		Cyclic-Siloxanes												
		(Free) Aniline	Total Heavy Metals	From Azo-colourants)	Amines (Cleavable	Restricted	Aromatic	PAHs	Phthalates	PFAS	Organotin Compounds	Organic Solvents	Halogenated Solvents	Glycols / Glycol Ethers	Flame Retardants	Equivalent Concern
																Dyes-Carcinogenic or Disperse Dyes
																Dyes-Aliphatic
1.6	Other Auxiliaries															
1.6.6	Resin Thermosensible	X						X	X	X	X	X	X			
1.6.7	Soaping	X							X	X						
1.6.8	Other Auxiliaries	X		X	X	X	X	X	X	X	X	X	X			
1.6.9	Down and Feather agents															
1.6.10	Garment treatment agents		X													
1.7	Dyes and pigments															
1.7.1	Pigments	X		X	X				(X)	(X)			X	X	X	(X)
1.7.2	Pigment dyes and pigment preparations	X		X	X				(X)	(X)			X	X	X	(X)
1.7.3	Pigment printing pastes	X		X	X				(X)	(X)			X	X	X	(X)
1.7.4	Pigment inks	X		X	X				(X)	(X)			X	X	X	(X)
1.7.5	Reactive dye	X			X		(X)				X		X	(X)	X	X
1.7.6	Reactive dye for cellulosics	X			X		(X)				X		X	(X)	X	X
1.7.7	Reactive dye for polyamide	X			X		(X)				X		(X)	(X)	X	X
1.7.8	Reactive dye for wool	X			X		(X)				X		(X)	(X)	X	X
1.7.9	Reactive Inks	X			X		(X)				X		(X)	(X)	X	X
1.7.10	Mordant dye	X		X	X		X									X
1.7.11	Direct dye	X		(X)	X					(X)		X		X		X
1.7.12	Disperse dye	X		X	X	X	X	(X)			X		X	X	X	X
1.7.13	Disperse inks	X		X	X	X	X	(X)			X		(X)	X	X	X
1.7.14	Basic dye (cationic dye)	X		X	(X)		X		X	X			X	X	X	X
1.7.15	Acid dye	X		(X)	X					(X)		X		X	X	X
1.7.16	Acid Inks	X		(X)	X					(X)		X		X	X	X
1.7.17	Metal complex dyes(for WO/PA)	X		X	X	(X)	X						X			X
1.7.18	Metal complex dyes 1:1	X		(X)	X		X			X		(X)		X		X
1.7.19	Metal complex dyes 2:1	X		X	X		X						X			X
1.7.20	Metal complex inks	X		X	X		X				X		(X)		X	X
1.7.21	Vat dye	X		X			X						X	X	X	X
1.7.22	Vat inks	X		X			X						X	X	X	X

	Chemical formulation type	UV Absorbers
1.7	Dyes and pigments	Thiourea
1.7.23	Sulphur dyes	X X X X X X X X X X X X X X X X
1.7.24	Dye Mixtures: Metal complex and disperse dye	X X X X X X X X X X X X X X X X
1.7.25	Dye mixtures: Metal complex, acid ad reactive dye	X X X X X X X X X X X X X X X X
1.7.26	Dye mixtures: Disperse and acid dye	X X X X X X X X X X X X X X X X
1.7.27	Natural dyes	X X X X X X X X X X X X X X X X
1.7.28	Solvent dyes	X X X X X X X X X X X X X X X X
1.7.29	Azoic dyes	X X X X X X X X X X X X X X X X
1.7.30	Indigo Dyes	X X X X X X X X X X X X X X X X
1.8	Ancillaries	
1.8.1	Cleaning/Maintenance Products	No specific guidance-Test depends on the product type
1.8.2	Other Ancillaries	No specific guidance-Test depends on the product type
1.9	Base Chemicals	
1.9.1	Acids	X X X X X X X X X X X X X X X X
1.9.2	Salts	(X) (X) X X X X X X X X X X X X X X
1.9.3	Based	(X) (X) X X X X X X X X X X X X X X
1.10	Screen Printing Ancillaries	
1.10.1	Photo Emulsion	
1.10.2	Sensitiser	
1.10.3	Screen Stripper/Remover	
1.10.4	De-greaser	X X X X X X X X X X X X X X X X

Table 2 Leather MRSL Risk Assessment Table

		Table 2 Leather MRSL Risk Assessment Table												
		Chemical formulation type												
2	Production-Leather													
2.1	Acids													
2.1.a	Acids_Hydroxy-carboxylic acids(Deliming agents)	X			(X)	(X)			X			(X)		X
2.1.b	Acids_Mineral acids	X			(X)	(X)			X			(X)		X
2.1.c	Acids_Organic acids	X			(X)	(X)			X			(X)		X
2.1.d	Acids_Blend of organic and inorganic acids	X			(X)	(X)			X			(X)		X
2.2	Auxiliaries													
2.2.a	Antifoam/slip agents	X							X		X		X	
2.2.b	Levelling agent	X			(X)				X	X			X	(X) X
2.2.c	Defoamer	X							X		X			(X) X
2.2.d	Foam stabilizer	X									(X)			
2.2.e	Penetrator	X												X
2.2.f	Rheology Modifier	X									(X)			
2.2.g	Water and effluent treatment chemicals													
2.3	Bases													
2.3.a	Bases_Ammonia or Amino-				(X)	(X)			X				(X)	
2.3.b	Bases_Calcium formate				(X)	(X)			X				(X)	
2.3.c	Bases_Lime(calcium hydroxide)				(X)	(X)			X				(X)	
2.3.d	Bases_Magnesium oxide				(X)	(X)			X				(X)	
2.3.e	Bases_Sodium acetate trihydrate				(X)	(X)			X				(X)	
2.3.f	Bases_Sodium bicarbonate				(X)	(X)			X				(X)	
2.3.g	Bases_Sodium carbonate				(X)	(X)			X				(X)	
2.3.h	Bases_Sodium formate				(X)	(X)			X				(X)	
2.3.i	Bases_Sodium hydroxide				(X)	(X)			X				(X)	
2.3.j	Bases_Blends				(X)	(X)			X				(X)	

Table 2 (continued) Leather MRSL Risk Assessment Table

Table 2 (continued) Leather MRSL Risk Assessment Table

	Chemical formulation type	UV Absorbers
2.9	Finishing Agents	
2.9.a	Protein Binders	X X
2.9.b	Crosslinkers(finishing)	
2.9.c	Flame retardant agents	X X
2.9.d	Halide Compounds	
2.9.e	Handle modifiers	X
2.9.f	Acrylic polymers(base coat, top coat, ect.)	
2.9.g	Cellulose Derivatives(base coat, top coat ect.)	X
2.9.h	Polyurethane dispersions (base coat, top coat ect.)	
2.9.i	Matting agents_Inorganic	
2.9.j	Matting agents_Organic	
2.9.k	Resins	X
2.9.l	Waxes	X X
2.9.m	Stucco	X
2.9.n	Patent leather	
2.9.o	Transfer coating	
2.9.p	Finishing Fillers_Inorganic fillers	X
2.9.q	Finishing Fillers_Organic fillers	X
2.9.r	Compounds	X
2.9.s	Anti Soil& repellent Finish	X
		(Free) Aniline
		Total Heavy Metals
		from Azo-colourants)
		Amines (Cleavable
		Restricted Aromatic
		PAHs
		Phthalates
		PFAS
		Organotin Compounds
		Organic Solvents
		Halogenated Solvents
		Glycols / Glycol Ethers
		Flame Retardants
		Equivalent Concern
		Dyes-Carcinogenic or
		Dyes-Altergenic
		Disperse Dyes
		Dyes-Afftergenic
		Chlorophenols
		Chlorotoluenes
		Chlorobenzenes and
		Chlorinated Paraffins
		Biocides
		Anti-microbials and
		AP&APEO

	Chemical formulation type	UV Absorbers
	Preserving Agents	Thiourea
2.10	Bactericides for preservation during leather manufacture	X
2.10.a	Fungicides for preservation during leather manufacture	X
2.10.b	Biocides for transport/ article protection	X
2.10.c	Sanitizers	X
2.10.d	Salts	(X)
2.11	Solvents	X
2.12	Solvents_Degreasing solvent	(X)
2.12.a	Solvents_Finishing solvent	(X)
	Tanning and Retanning agents	Cyclic Siloxanes
2.13	Tanning Auxiliaries	Borate, zinc salt
2.13.a	Mineral tanning agents	Quinoline
2.13.b	Mineral/ synthetic tanning agent blends	Salt
2.13.c	Synthetic organic tanning agents	Perboric Acid, Sodium
2.13.d	Vegetable tannins	Cyclic Siloxanes
2.13.e	Reactive organic tanning agents	(Free) Aniline
2.13.f	Resin tanning agents	ethanol (AEEA)
2.13.g	Polymeric retanning agent	2-(2-Aminoethyl)amino
2.13.h	Retanning Fillers_Inorganic fillers	ADCA
2.13.i	Retanning Fillers_Organic fillers	BPA
2.13.j	AP&APEO	Phthalates
		PFAS
		Organotin Compounds
		Organic Solvents
		Halogenated Solvents
		Glycols / Glycol Ethers
		Flame Retardants
		Equivalent Concern or Dyes-Carcinogenic or Dyes-Altergenic
		Disperse Dyes
		Dyes-Altergenic
		Chlorophenols
		Chlorotoluenes
		Chlorobenzenes and Chlorinated Paraffins
		Biocides
		Anti-microbials and
		AP&APEO

Table 3 Synthetic Materials - MRSL Risk Assessment Table

	Chemical formulation type	UV Absorbers
3	Production-Artificial Leather& Synthetic Leather	Thiourea Quinoline Salt Perboric Acid, Sodium Cyclic Siloxanes
3.1	Resin	X
3.1.a	Polyurethane resin	X
3.1.a.i	Waterborne polyurethane resin	
3.1.a.ii	Solventborne polyurethane resin	X
3.1.a.iii	Solvent-free polyurethane resin	X
3.1.a.iv	Others	X
3.1.b	Polyvinyl chloride resin	X
3.1.c	Polyolefin resin	
3.1.d	Polyamide resin	
3.1.e	Poly(ethylene terephthalate) resin	
3.1.f	Polyethylene resin	
3.1.g	Thermoplastic polyurethane(TPU)	
3.1.h	Polyacrylates	
3.1.i	Others	
3.2	Colorant	X X X X
3.2.a	Dyestuff	X X X X
3.2.b	Organic pigment	(X) X X
3.2.c	Inorganic pigment	(X) X
3.2.d	Others	X X X X X
3.3	Filler	
3.4	Plasticizer	X X X X
3.5	Heat stabilizer	
	Biocides Anti-microbials and AP& APEO	Boate, zinc salt BPA ADCAs ethanol (AEEA) 2-(2-Aminoethylamino)

	Chemical formulation type	UV Absorbers
3	Production-Artificial Leather& Synthetic Leather	Thiourea Quinoline Salt Perboric Acid, Sodium Cyclic Siloxanes Borate, zinc salt BPA ADCA (Free) Aniline ethanol (AEEA) 2-(2-Aminoethyl)amino
3.6	Lubricant	X
3.6.a	Silicones	X
3.6.b	Waxes	X X
3.6.c	Others	X X
3.7	Foaming agent	
3.7.a	Physical foaming agent	
3.7.b	Chemical foaming agent	
3.7.c	Defoaming agent	X
3.8	Solvent	X X (X)
3.9	Surfactant	
3.10	Flame retardant	X X X (X) X X
3.11	Antioxidant	
3.12	Light stabilizer	
3.13	Antistatic agent	X (X)
3.14	Anti-mildew agent	X X
3.15	Finishing agent	
3.15.a	Waterborne finishing agent	
3.15.b	Solventborne finishing agent	
3.15.c	Others	
3.16	Anti-hydrolyses agents	
3.17	Thickeners	
3.18	Crosslinkers	
3.19	Dulling agents	
3.20	Others	
	Chlorinated Paraffins	
	Biocides	
	Anti-microbials and	
	AP&APEO	

	Chemical formulation type	UV Absorbers
4.1	Rubber	
4.1.1	Polymer	
4.1.2	Blowing Agent	
4.1.3	Filler	
4.1.4	Pigment	X
4.1.5	Dyestuff	X
4.1.6	Activators/ Accelerators	
4.1.7	Coupling Agents	
4.1.8	Homogenizing Agent	
4.1.9	Processing Aid	
4.1.10	Antistatic/ Plasticizer	X
4.1.11	Crosslinking Agent/ Vulcanizing Agent	
4.1.12	Antioxidant	
4.1.13	UV stabilizer	
4.1.14	Curing Agent	
4.2	Foam	
4.2.1	Polymer	
4.2.2	Blowing Agent	
4.2.3	Filler	
4.2.4	Pigment	X
4.2.5	Dyestuff	X
4.2.6	Activators/ Accelerators	
4.2.7	Coupling Agents	
4.2.8	Processing Aid	
4.2.9	Crosslinking Agent	
4.2.10	PBPDs	
4.3	Adhesives	
4.3.1	Hotmelt	
4.3.2	Polymer	
4.3.3	Hardeners	
4.3.4	Carriers(W/B or S/B)	
4.3.5	Catalyst	
	Chlorobenzenes and Chlorophenols	
	Chlorinated Paraffins	
	Biocides	
	Anti-microbials and AP& APEO	
	(Free) Aniline	
	ethanol (AEAA)	
	2-(2-Aminoethyl)amino)	
	Total Heavy Metals	
	from Azo-cobaltants)	
	Amines (Cleavable	
	Restricted Aromatic	
	PAHs	
	PFAS	
	Phthalates	
	Organotin Compounds	
	Organic Solvents	
	Glycols / Glycol Ethers	
	Halogenated Solvents	
	Flame Retardants	
	Equivalent Concern Dyes-Catchingenic or Disperse Dyes	
	Dyes-Aliphatic	

Table 5 MRS Limit Table

Substance	CASNO	Test Method	Requirement	Supplier Guidance
AP& APEOs				
Nonylphenol(NP), mixed isomers	104-40-5	ISO 21084	Sum=100mg/kg	No intentional use
	11066-49-2			
	25154-52-3			
	84852-15-3			
Nonylphenol ethoxylates (NPEO)	9016-45-9	ISO 18254	Sum=250mg/kg	No intentional use
	26027-38-3			
	37205-87-1			
	68412-54-4			
	127087-87-0			
Octylphenol (OP), mixed isomers	140-66-9	ISO 21084	Sum=100mg/kg	No intentional use
	1806-26-4			
	27193-28-8			
Octylphenol ethoxylates (OPEO)	9002-93-1	ISO 18254	Sum=250mg/kg	No intentional use
	9036-19-5			
	68987-90-6			
Anti-microbials and Biocides				
Dimethylfumarate (DMFu)	624-49-7	ISO 16186	10 mg/kg	No intentional use
O-Phenylphenol (+salts)	90-43-7	ISO 22992-1(Textile) EN 17134 ISO 13365-1(Leather)	Textile: 5000 mg/kg Leather: -	Textile: No intentional use Leather: Use is permitted for chemical preservation for transportation and storage of raw hides and tanned semi-finished products (wet-white, wet-blue). Chemical preservation of coated or uncoated finished leather shall not be permitted.
Permethrin	52645-53-1	Solvent extraction, LC MS GC MS	250 mg/kg	No intentional use
Triclosan	3380-34-5	Solvent extraction, LC MS, DAD ISO 22992-2	250 mg/kg	No intentional use

Table 5 (Continued) MRS Limit Table

Substance	CASNO	Test Method	Requirement	Supplier Guidance
Chlorinated Paraffins				
Short-chain Chlorinated Paraffins (SCCPs) (C10-C13)	85535-84-8	ISO 22818	250 mg/kg	No intentional use
Medium-chain Chlorinated Paraffins (MCCPs) (C14-C17)	85535-85-9	ISO 22818	250 mg/kg	No intentional use
Chlorobenzenes and Chlorotoluenes				
1,2-Dichlorobenzene	95-50-1	EN 17137	500 mg/kg	No intentional use
Other isomers of mono-, di-, tri-, tetra-, penta- and hexa-Chlorobenzene and mono-, di-, tri-, tetra- and penta-chlorotoluene	Multiple, including 108-90-7 541-73-1 106-46-7 87-61-6 120-82-1 108-70-3 634-66-2 634-90-2 95-94-3 608-93-5 118-74-1 95-49-8 108-41-8 106-43-4 32768-54-0 95-73-8 19398-61-9 118-69-4 95-75-0 25186-47-4 7359-72-0 2077-46-5 6639-30-1 23749-65-7 21472-86-6 1006-32-2 875-40-1 1006-31-1 877-11-2	EN 17137	Sum= 200 mg/kg Tetrachlorotoluene: 10 mg/kg Trichlorotoluene: 10 mg/kg	No intentional use

Table 5 (Continued) MRS Limit Table

Substance	CASNO	Test Method	Requirement	Supplier Guidance
Chlorophenols				
2-Chlorophenol	95-57-8	GC-MS DIN 50009 or EN ISO 17070	Sum= 50 mg/kg	No intentional use
3-Chlorophenol	108-43-0			
4-Chlorophenol	106-48-9			
2,3-Dichlorophenol	576-24-9			
2,4-Dichlorophenol	120-83-2			
2,5-Dichlorophenol	583-78-8			
2,6-Dichlorophenol	87-65-0			
3,4-Dichlorophenol	95-77-2			
3,5-Dichlorophenol	591-35-5			
2,3,4-Trichlorophenol	15950-66-0			
2,3,5-Trichlorophenol	933-78-8			
2,3,6-Trichlorophenol	933-75-5			
2,4,5-Trichlorophenol	95-95-4			
2,4,6-Trichlorophenol	88-06-2			
3,4,5-Trichlorophenol	609-19-8			
2,3,4,5-Tetrachlorophenol	4901-51-3	GC-MS DIN 50009 or EN ISO 17070	Sum= 15 mg/kg	No intentional use
2,3,4,6-Tetrachlorophenol	58-90-2			
2,3,5,6-Tetrachlorophenol	935-95-5			
Pentachlorophenol (PCP)	87-86-5	GC-MS DIN 50009 or EN ISO 17070	5 mg/kg	No intentional use

Table 5 (Continued) MRSL Limit Table

Substance	CASNO	Test Method	Requirement	Supplier Guidance
Dyes-Allergenic Disperse Dyes				
C.I. Disperse Blue 7	3179-90-6	DIN 54231	250mg/kg each	No intentional use
C.I. Disperse Blue 26	3860-63-7			
C.I. Disperse Blue 35	12222-75-2 56524-77-7			
C.I. Disperse Blue 102	12222-97-8			
C.I. Disperse Blue 106	12223-01-7			
C.I. Disperse Blue 124	61951-51-7			
C.I. Disperse Brown 1	23355-64-8			
C.I. Disperse Orange 1	2581-69-3			
C.I. Disperse Orange 3	730-40-5			
C.I. Disperse Orange 37/59/76	13301-61-6			
C.I. Disperse red 1	2872-52-8			
C.I. Disperse red 11	2872-48-2			
C.I. Disperse red 17	3179-89-3			
C.I. Disperse yellow 1	119-15-3			
C.I. Disperse yellow 3	2832-40-8			
C.I. Disperse yellow 9	6373-73-5			
C.I. Disperse yellow 39	12236-29-2			
C.I. Disperse yellow 49	54824-37-2			

Table 5 (Continued) MRS Limit Table

Substance	CASNO	Test Method	Requirement	Supplier Guidance
Dyes-Carcinogenic or Equivalent Concern				
C.I.Acid Red 26	3761-53-3	DIN 54231	250mg/kg each	No intentional use
C.I.Acid Violet 49	1694-09-3			
C.I.Basic Blue 26 (with Michler's Ketone >0.1%)	2580-56-5			
C.I.Basic Green 4 (Malachite Green Chloride)	569-64-2			
C.I.Basic Green 4 (Malachite Green Oxalate)	2437-29-8			
C.I.Basic Green 4 (Malachite Green)	10309-95-2			
C.I.Basic Green 4 leuco base	129-73-7			
C.I.Basic Red 9	569-61-9			
C.I.Basic Violet 14	632-99-5			
C.I.Basic Violet 3 (with Michler's Ketone >0.1%)	548-62-9			
C.I.Direct Black 38	1937-37-7			
C.I.Direct Blue 6	2602-46-2			
C.I.Direct Red 28	573-58-0			
C.I.Disperse Blue 1	2475-45-8			
C.I.Disperse Blue 3	2475-46-9			
C.I.Disperse Orange 11	82-28-0			

Table 5 (Continued) MRS Limit Table

Substance	CASNO	Test Method	Requirement	Supplier Guidance
Flame Retardants				
2,2-Bis(bromomethyl)-1,3-propanediol(BBMP)	3296-90-0	Solvent extraction, GC-MS and/or LC-MS or Methanol extraction, ICP	250mg/kg each	No intentional use
Bis(2,3-dibromopropyl)phosphate(BDBPP)	5412-25-9			
Boric acid	10043-35-3,11113-50-1			
Decabromobiphenyl(DecaBB)	13654-09-6			
Decabromodiphenyl ether(DecaBDE)	1163-19-5			
Diboron trioxide	1303-86-2			
Dibromobiphenyls(DiBB)	Multiple			
Disodium octaborate	12008-41-2			
Disodium tetraborate, anhydrous	1303-96-4,1330-43-4			
Heptabromodiphenyl ether(HeptaBDE)	68928-80-3			
Hexabromocyclododecane(HBCDD)	3194-55-6			
Hexabromodiphenyl ether(HexaBDE)	36483-60-0			
Monobromobiphenyls(MonoBB)	Multiple			
Monobromodiphenyl ether(MonoBDEs)	Multiple			
Nonabromobiphenyls(NonaBB)	Multiple			
Nonabromodiphenyl ether(NonaBDE)	63936-56-1			
Octabromobiphenyls (OctaBB)	Multiple			
Octabromodiphenyl ether(OctaBDE)	32536-52-0			
Pentabromodiphenyl ether(PentaBDE)	32534-81-9			
Tetraboron disodium heptaoxide, hydrate	12267-73-1			
Tetrabromobisphenol A(TBBPA)	79-94-7			
Tetrabromobisphenol A bis(2,3-dibromopropyl ether)	21850-44-2			
Tetrabromodiphenyl ether(TetraBDE)	40088-47-9			
Tri-o-cresyl phosphate	78-30-8			
Tribromodiphenyl ethers(TriBDEs)	Multiple			
Trimethyl phosphate	512-56-1			
Tris(1-aziridinyl) phosphine oxide(TEPA)	545-55-1			
Tris(1,3-dichloro-isopropyl) phosphate(TDCP)	13674-87-8			
Tris(2-chloro-1-methylethyl) phosphate(TCPP)	13674-84-5			
Tris(2-chloroethyl) phosphate(TCEP)	115-96-8			
Tris(2,3,-dibromopropyl) phosphate(TRIS)	126-72-7			
Trixyl phosphate(TXP)	25155-23-1			

Table 5 (Continued) MRS Limit Table

Substance	CASNO	Test Method	Requirement	Supplier Guidance
Glycols/ Glycol Ethers				
2-Ethoxyethanol	110-80-5	LC-MS, GC-MS	50mg/kg each	No intentional use
2-Ethoxyethyl acetate	111-15-9			
2-Methoxyethanol	109-86-4			
2-Methoxyethyl acetate	110-49-6			
2-Methoxypropanol	1589-47-5	LC-MS, GC-MS	Leather: - Others: 50mg/kg	Leather: - Others: No intentional use
2-Methoxypropyl acetate	70657-70-4	LC-MS, GC-MS	Leather: 50mg/kg; Finishing formulations: 1000mg/kg Others: 50mg/kg	No intentional use
Bis(2-methoxyethyl) ether	111-96-6	LC-MS, GC-MS	50mg/kg each	No intentional use
Ethylene glycol dimethyl ether	110-71-4			
Triethylene glycol dimethyl ether	112-49-2			
Halogenated Solvents				
1,2-Dichloroethane	107-06-2	GC- MS	5 mg/kg	No intentional use
Benzyl chloride	100-44-7	GC-MS with confirmatory LC-MS in the event of a positive detection	50 mg/kg Dyes: 100 mg/kg	No intentional use
Methylene chloride	75-09-2	GC- MS	5 mg/kg	No intentional use
Tetrachloroethylene	127-18-4	GC- MS	5 mg/kg	No intentional use
Trichloroethylene	79-01-6	GC- MS	40 mg/kg	No intentional use

Table 5 (Continued) MRS Limit Table

Substance	CASNO	Test Method	Requirement	Supplier Guidance
Organic Solvents				
Benzene	71-43-2	GC-MS	50 mg/kg	No intentional use
Cresol(all isomers)	1319-77-3			
o-Cresol	95-48-7			
m-Cresol	108-39-4	GC-MS	500 mg/kg	No intentional use
p-Cresol	106-44-5			
N,N-dimethylacetamide(DMAC)	127-19-5	GC-MS	1000 mg/kg	No intentional use
N,N-Dimethylformamide(DMFA)	68-12-2	GC-MS, ISO/TS 16189	1000 mg/kg	No intentional use
N-Ethyl-2-pyrrolidone(NEP)	2687-91-4	GC-MS	1000 mg/kg	No intentional use
N-Methyl-2-Pyrrolidone(NMP)	872-50-4	GC-MS, ISO 19070 (GC-MS)	1000 mg/kg	No intentional use
Toluene	108-88-3	GC-MS	500 mg/kg	No intentional use
Xylene(all isomers)	1330-20-7			
o-Xylene	95-47-6			
m-Xylene	108-38-3	GC-MS	500 mg/kg	No intentional use
p-Xylene	106-42-3			

Table 5 (Continued) MRS Limit Table

Substance	CASNO	Test Method	Requirement	Supplier Guidance
Organotin Compounds				
Dibutyltin(DBT)	Multiple, including 683-18-1	Solvent extraction, GC-MS, ISO TS 16179, ISO 22744-1	Polyurethane based thickeners: 100 mg/kg Others: 20 mg/kg	No intentional use
Dipropyltin compounds (DPT)	Multiple, including 867-36-7			
Mono- and tri- butyltin derivatives	Multiple, including 1118-46-3 1461-22-9			
Mono-, di- and tri methyltin derivatives	Multiple, including 993-16-8 753-73-1 1066-45-1	Solvent extraction, GC MS, ISO TS 16179	5 mg/kg each	No intentional use
Mono-, di- and tri octyltin derivatives	Multiple, including 3091-25-6 3542-36-7 2587-76-0			
Mono-, di- and tri phenyltin derivatives	Multiple, including 1124-19-2 1135-99-5 639-58-7			
Tetrabutyltin compounds (TeBT)	Multiple, including 1461-25-2			
Tetraethyltin compounds (TeET)	Multiple, including 597-64-8			
Tetraoctyltin compounds (TeOT)	Multiple, including 3590-84-9	Solvent extraction, GC MS, ISO TS 16179	1 mg/kg each	No intentional use
Tricyclohexyltin (TCyHT)	Multiple, including 3091-32-5			
Tripropyltin Compounds (TPT)	Multiple, including 2279-76-7			

Table 5 (Continued) MRS Limit Table

Substance	CASNO	Test Method	Requirement	Supplier Guidance
Perfluorinated and Polyfluorinated Chemicals (PFAS)				
Perfluorobutane sulfonic acid (PFBS)	375-73-5	LC-MS or GC-MS	1000 µg/kg	No intentional use
Perfluorohexane sulfonic acid (PFHxS)	355-46-4		1000 µg/kg	
Perfluorooctane sulfonic acid (PFOS) and related substances	Multiple, including 1763-23-1		Sum= 2000 µg/kg	
Perfluorodecane sulfonic acid (PFDS)	335-77-3		1000 µg/kg	
Perfluorobutanoic acid (PFBA)	375-22-4		1000 µg/kg	
Perfluorohexanoic acid (PFHxA) and related substances	Multiple, including 307-24-4		PFHxA=25 µg/kg PFHxA-related substances=1000 µg/kg	
Perfluoroctanoic acid (PFOA) and related substances	Multiple, including 335-67-1		PFOA=25 µg/kg PFOA-related substances=1000 µg/kg	
Perfluorodecanoic acid (PFDA)	335-76-2		1000 µg/kg	
4:2 Fluorotelomer alcohols (4:2 FTOH)	2043-47-2		1000 µg/kg	
6:2 Fluorotelomer alcohols (6:2 FTOH)	647-42-7		1000 µg/kg	
8:2 Fluorotelomer alcohols (8:2 FTOH)	678-39-7		1000 µg/kg	
10:2 Fluorotelomer alcohols (10:2 FTOH)	865-86-1		1000 µg/kg	

Table 5 (Continued) MRS Limit Table

Substance	CASNO	Test Method	Requirement	Supplier Guidance
Phthalates – including all other esters of ortho-phthalic acid				
1,2-Benzenedicarboxylic acid, di C6-8-branched and linear alkyl esters, C7-rich (DIHP)	71888-89-6	GC-MS ISO 14389	Sum=250 mg/kg	No intentional use
1,2-Benzenedicarboxylic acid, di C7-11-branched and linear alkyl esters (DHNUP)	68515-42-4			
1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4			
1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0			
Benzyl butyl phthalate (BBP)	85-68-7			
Bis (2-methoxyethyl) phthalate (DMEP)	117-82-8			
Di (ethylhexyl) phthalate (DEHP)	117-81-7			
Di-iso-butyl phthalate (DIBP)	84-69-5			
Di-iso-decyl phthalate (DIDP)	26761-40-0			
Di-iso-nonyl phthalate (DINP)	28553-12-0			
Di-iso-octyl phthalate (DIOP)	27554-26-3			
Di-iso-pentyl phthalates (DIPP)	605-50-5			
Di-n-hexyl phthalate (DnHP)	84-75-3			
Di-n-octyl phthalate (DNOP)	117-84-0			
Di-n-pentyl phthalate (DnP)	131-18-0			
Di-n-propyl phthalate (DPRP)	131-16-8			
Dibutyl phthalate (DBP)	84-74-2			
Dicyclohexyl phthalate (DCHP)	84-61-7			
Diethyl phthalate (DEP)	84-66-2			
Diisohexyl phthalate	71850-09-4			
Dinonyl phthalate (DNP)	84-76-4			
Dinonyl phthalate (DNP)	776297-69-9			

Table 5 (Continued) MRS Limit Table

Substance	CASNO	Test Method	Requirement	Supplier Guidance
Polycyclic Aromatic Hydrocarbons (PAHs)				
Benzo[a]pyrene (BaP)	50-32-8	GC-MS AfPS GS 2019	20 mg/kg	No intentional use
Naphthalene ³	91-20-3		Leather: 200 mg/kg Others: Sum (3) = 200 mg/kg	
Acenaphthene ^{3,4}	83-32-9			
Acenaphthylene ^{3,4}	208-96-8			
Anthracene ^{3,4}	120-12-7			
Benzo[a]anthracene ^{3,4}	56-55-3			
Benzo[b]fluoranthene ^{3,4}	205-99-2			
Benzo[e]pyrene ^{3,4}	192-97-2			
Benzo[ghi]perylene ^{3,4}	191-24-2			
Benzo[j]fluoranthene ^{3,4}	205-82-3			
Benzo[k]fluoranthene ^{3,4}	207-08-9			
Chrysene ^{3,4}	218-01-9			
Dibenz[a,h]anthracene ^{3,4}	53-70-3			
Fluoranthene ^{3,4}	206-44-0			
Fluorene ^{3,4}	86-73-7			
Indeno[1,2,3-cd]pyrene ^{3,4}	193-39-5			
Phenanthrene ^{3,4}	85-01-8			
Pyrene ^{3,4}	129-00-0			

Table 5 (Continued) MRSL Limit Table

Substance	CASNO	Test Method	Requirement	Supplier Guidance
Restricted Aromatic Amines (Cleavable from Azo-colourants)				
2-Naphthylamine	91-59-8	ISO 14362	150 mg/kg each	No intentional use
2,4-Xylylidine	95-68-1			
2,4,5-Trimethylaniline	137-17-7			
2,6-Xylylidine	87-62-7			
3,3'-Dichlorobenzidine	91-94-1			
3,3'-Dimethoxybenzidine	119-90-4			
3,3'-Dimethylbenzidine	119-93-7			
4-Aminoazobenzene	60-09-3			
4-Aminobiphenyl	92-67-1			
4-Chloro-o-toluidine	95-69-2			
4-Chloroaniline	106-47-8			
2,4-Diaminoanisol	615-05-4			
2,4-Toluenediamine	95-80-7			
4,4'-Methylene-bis-(2-chloroaniline)	101-14-4			
4,4'-Methylenedi-otoluidine	838-88-0			
4,4'-Diaminodiphenylmethane	101-77-9			
4,4'-Oxydianiline	101-80-4			
4,4'-Thiodianiline	139-65-1			
2-Amino-4-nitrotoluene	99-55-8			
Benzidine	92-87-5			
p-Cresidine	120-71-8			
o-Aminoazotoluene	97-56-3			
o-Anisidine	90-04-0			
o-Toluidine	95-53-4			
Salt of 2-Naphthylammonium acetate	553-00-4			
Salt of 2,4,5-trimethylaniline hydrochloride	21436-97-5			
Salt of 4-chloro-o-toluidinium chloride	3165-93-3			
Salt of 4-methoxy-mphenylene diammonium sulphate	39156-41-7			

Table 5 (Continued) MRS Limit Table

Substance	CASNO	Test Method	Requirement	Supplier Guidance
Total Heavy Metal				
Antimony (Sb)	7440-36-0	Acid digestion, ICP/AAS	Dye 50 mg/kg Pigment 250 mg/kg	No intentional use
Arsenic (As)	7440-38-2	Acid digestion, ICP/AAS	50 mg/kg	No intentional use
Barium (Ba)	7440-39-3	Acid digestion, ICP/AAS	Dye&Pigment 100 mg/kg	No intentional use
Cadmium (Cd)	7440-43-9	Acid digestion, ICP/AAS	Pigment 50 mg/kg Others: 20 mg/kg	No intentional use
Chromium (Cr)	7440-47-3	Acid digestion, ICP/AAS	Dye&Pigment 100 mg/kg	No intentional use
Chromium (VI)	18540-29-9	HPLC / DAD Ion chromatography (IC) with UV detection	10 mg/kg	No intentional use
Cobalt (Co)	7440-48-4	Acid digestion, ICP/AAS	Dye 500 mg/kg	No intentional use
Copper (Cu)	7440-50-8	Acid digestion, ICP/AAS	Dye 250 mg/kg	No intentional use
Lead (Pb)	7439-92-1	Acid digestion, ICP/AAS	100 mg/kg	No intentional use
Mercury (Hg)	7439-97-6	Acid digestion, ICP/AAS	Pigment 25 mg/kg Others: 4 mg/kg	No intentional use
Nickel (Ni)	7440-02-0	Acid digestion, ICP/AAS	Dye 250 mg/kg	No intentional use
Selenium (Se)	7782-49-2	Acid digestion, ICP/AAS	Dye 20 mg/kg Pigment 100 mg/kg	No intentional use
Silver (Ag)	7440-22-4	Acid digestion, ICP/AAS	Dye 100 mg/kg	No intentional use
Tin (Sn)	7440-31-5	Acid digestion, ICP/AAS	Dye 250 mg/kg	No intentional use
(Free) Aniline				
(Free) Aniline	62-53-3	Indigo - Reductive method (ISO 14362) Other - Non-reductive (ISO 14362 without reductive step)	Indigo Dye 2000 mg/kg Other Dye 500 mg/kg	No intentional use
Note	Used in the manufacture of Indigo and some azo dyes. Residues from manufacturing can remain in the formulation. For all dyes other than indigo, it is important that non-reductive methods are used so that only the free aniline is analysed rather than that which could be formed by the cleavage of a dye molecule. For indigo, aniline can be tied up in insoluble clusters of dye and so a reductive method that fully solubilises the dye and liberates free aniline is used. The levels of aniline in indigo must be achieved by removal of the aniline and not by dilution, with a minimum indigo content of 30% being required.			
2- (2-Aminoethylamino) ethanol (AEEA)				
2- (2-Aminoethylamino) ethanol (AEEA)	111-41-1	Solvent extraction,LC MS/MS or GC-MS (Substance is not stable in aqueous matrices or solutions)	100 mg/kg	No intentional use
Note	AEEA is used in chelating agents, surfactants and fabric softeners.			

Table 5 (Continued) MRSL Limit Table

Substance	CASNO	Test Method	Requirement	Supplier Guidance			
ADCA							
Diazene-1,2-dicarboxamide [C,C'-azodi (formamide)] (ADCA)	123-77-3	LC/MS, LC/DAD	1000 mg/kg	No intentional use			
Bisphenol A (BPA)							
Bisphenol A (BPA)	80-05-7	Solvent extraction,LC MS/MS、GC MS	Textile& Leather: 100 mg/kg Polymers(R,F,A): -	Textile& Leather: No intentional use Polymers(R,F,A): No restriction			
Note	Bisphenol A (BPA) is a precursor chemical used along with other chemicals to create some plastics and resins. It is commonly used to harden plastics.						
Borate, zinc salt							
Borate, zinc salt	1332-07-6	Acid digestion, ICP	1000 mg/kg	No intentional use			
Note	Borate, zinc salt can be used as a flame retardant as well as in paints, pigments and adhesives.						
Cyclic siloxane							
D4 (Octamethylcyclotetrasiloxane)	556-67-2	TEGEWA method, Choroform extraction, GC/MS	1000 mg/kg	No intentional use			
D5 (Decamethylcyclopentasiloxane)	541-02-6						
D6 (Dodecamethylcyclohexasiloxane)	540-97-6						
Note	Cyclic siloxane can be present as contaminants in the formulations that contain silicone, such as softeners.						
Perboric acid, sodium salt							
Perboric acid, sodium salt	Multiple, including 11138-47-9 15120-21-5 7632-04-04 16940-66-2 13517-20-9 125022-34-6 90568-23-3	Methanol extraction, ICP	1000 mg/kg	No intentional use			

Table 5 (Continued) MRS Limit Table

Substance	CASNO	Test Method	Requirement	Supplier Guidance
Quinoline				
Quinoline	91-22-5	DIN 54231, LC-MS	1000 mg/kg	No intentional use
Note	Contaminant in dispersing agents in disperse dyes.			
Thiourea				
Thiourea	62-56-6	Solvent extraction,LC MS/MS, LC-DAD MS	1000 mg/kg	No intentional use
Note	In several formulations, thiourea is used to improve solubility. It can be used as a cross-linker.			
UV Absorbers				
2-Benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	3846-71-7	Solvent extraction,LC-MS/MS, GC-MS	1000 mg/kg	No intentional use
2,4-Di-tert-butyl-6-(5-chlorobenzotriazole-2-yl)phenol (UV-327)	3864-99-1			
2-(2Hbenzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1			
2-(2Hbenzotriazol-2-yl)-4-(tert-butyl)-6-(secbutyl) phenol (UV-350)	36437-37-3			

6. Recognized laboratory

SHEIN recognizes laboratories recognized by ZDHC, and we recommend contacting the following third-party laboratories with close cooperation with SHEIN (in no particular order) for MRSI related testing and verification:

Lab Name	Lab Address	Contact Person	Phone
Intertek Guangzhou	Room 601, No. 8, Bao Ying East Road, Huangpu District, Guangzhou City, Guangdong Province, China	Twinkle Zhang	13760750068
BV Guangzhou	Block B, Merrill Plaza, No. 183, Dongchong Section, Shi Nan Road, Nansha District, Guangzhou City, Guangdong Province, China	Kelvin Yuan	18022362100
BV Shanghai	168 Guanghua Road, Zhuanqiao Town, Minhang District, Shanghai	Will Yin	15316763081
TÜV SÜD Xiamen	Unit 401, No. 93 Huli Industrial Park, Meixi Road, Tong'an District, Xiamen City, Fujian Province	Luca Chen	18675840326
SGS Guangzhou	3/F, No. 198 Kezhu Road, Science City, Economic and Technological Development Zone, Tianhe District, Guangzhou	Ada Zheng	15818124759

7. Version change log

Version	Scope	Modification
B0	All	Initial Version
B1	None	Modified Version