MUJI Product Restricted Substances List (MUJI RSL)



SCOPE

- •Apparel(including inner wear): Any garment worn on the body intended to protect, cover, or adorn.
- •Footwear: Any durable covering for the feet intended to protect, cover, or comfort.
- ·Accessories(including bag): Any product intended to complement apparel, both carried and worn.
- ·Home Textiles: Any product intended for functional or decorative purposes in the home.
- •Trim Parts: Except for the packaging materials, all the trims and accessories that sewed in the products(sewing thread, button, interlining, lining, zips, care labels, etc.)

Product Examples

The following are only examples. If you are unsure whether your product falls within the scope of this list, please contact us.

Apparel	Footwear	Accessories	Home Textiles
Shirts	Shoes	Hats	Towels
Pants/trousers	Sandals	Headbands	Bathrobes
Socks	Flip-flops	Scarves	Bedding(e.g. duvet covers, pillow covers, down duvets,
Jackets	Boots	Bags(e.g. handbags, pouches, cases, etc)	mattresses, blankets, etc.)
Sweatshirts and hoodies	Slippers	Shoelaces	Upholstered furniture(e.g. sofas, chairs, etc.)
Sweaters		Belts	Cushions
Underwear		Hair clips	Placemats
Aprons		Gloves	Floor mops
		Jewelry	Cleaning tools
		Sunglasses	Felt products
		Suitcases	Storages
			Laundry nets
			Pot holders/trivets

Definitions of Material Types

Natural fibers. Animal or vegetable fibers (including semi-synthetics).

Blended fibers. Woven or knitted materials created by blending two or more fiber types. For the purpose of this RSL, a blended fiber consists of a natural and a synthetic fiber.

Synthetic fibers. Human-made fibers based on synthetic chemicals (often from petroleum sources) such as polymers and extruded fibers.

Synthetic coated fabrics. Leather-like materials composed of a textile backing and, typically, a PU or PVC coating. May be referred to as artificial, imitation, vegan, or synthetic leather, or pleather.

Natural leather. Created by tanning animal rawhides.

Coating. A fluid, semi-fluid, or other material, with or without a suspension of finely divided coloring matter, which changes to a solid film when a thin layer is applied to a metal, wood, stone, paper, leather, cloth, plastic, or other surface.

Coatings do not include printing inks or those materials which actually become a part of the substrate, such as the pigment in a plastic article or those materials which are actually bonded to the substrate, such as by electroplating or ceramic glazing. See "synthetic coated fabrics" for leather-like materials where the coating becomes part of the substrate.

Printing. The process of applying color to a fabric in definite patterns or designs.

Natural materials. 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.

Crystal. In this variety of glass, also known as lead glass, lead replaces calcium content of a typical potash glass. The addition of lead oxide gives crystal a much higher index of refraction than normal glass, and consequently much greater sparkle. Crystal typically contains at least 24% lead and is therefore exempt from many regulatory requirements for jewelry. In the European Union, labeling of crystal products is regulated by Council Directive 69/493/ EEC, which defines four categories based on the chemical composition and properties of the material.

Polymers and plastics. Plastics are composed of various polymers (typically from petroleum sources) usually mixed with additives including

colorants, plasticizers, stabilizers, and fillers. These additives affect the chemical composition, chemical properties, and mechanical properties of the plastic.

Natural rubber. Elastic material made from latex sap or trees that can be vulcanized.

Synthetic rubber. Material made from petroleum- based monomers with properties similar to natural rubber.

Foam. Spongy material made by trapping air bubbles in a solid. These can be open cell or closed cell.

Metals. Chemical elements that can be lustrous, ductile, malleable, and good conductors of heat and electricity. Includes metals deposited by physical vapor deposition (PVD), chemical vapor deposition (CVD), or electroplating.

Feathers and down. Includes the smaller down feathers as well as the larger contour and flight feathers. See the International Down and Feather Bureau for specific down and feather definitions.

Glue. A substance capable of holding materials together by surface attachment.

Examples of Materials within the Scope of the MUJI RSL

Including	Blended Fibers	Synthetic Fibers	Coated	Natural Leather & Fur Skin	Coatings & Prints		Other Materials	Polymers, Plastics, Foams, Natural Rubber & Synthetic Rubber	IMetal	Feathers & Down	Glue
·Cotton	·Cotton Polyester	·Polyester	Textiles with:	·Leather	Printing techniques	·Horn	·Glass	·Ethylene vinyl	·Stainless	· Feathers	·Hot melt
·Wool	· Wool-Nylon	 Acrylic 	 Polyurethane 	·Fur skin	such as:	·Bone	 Synthetic 	acetate (EVA)	steel	•Down	adhesive
 Silk 	·Ramie Polyester	 Nylon 	(PU) coating	·Bonded/recycled	·Heat transfers	·Cork	stone	·Polystyrene (PS)	·Brass		 Powdered
·Hemp		-Polyamide	· Polyvinyl	leather	·Dye sublimation	•Wood	 Porcelain 	·Polyethylene (PE)	·Copper		adhesive
·Cashmere			Chloride (PVC)		printing	·Paper	· Ceramic	·Acrylonitrile	·Gold		·Flock
· Linen			coating		·Screen printing	·Straw	·Crystal	butadiene styrene	·Silver		adhesive
 Fur hair 			·Other		·Direct-to garment	·Stone		(ABS)	•Aluminum		·Contact
·Rayon			Polymeric		printing	·Shell (e.g. coconut		·Neoprene			adhesive
(semi synthetic)			coatings		·Discharge	or mother of pearl)		·Polypropylene (PP)			·Latex glue
·Lyocell					printing	·Jacron (a semi-		·Polycarbonate (PC)			·Polyure-
(semi synthetic)					·Plastisol	synthetic paper		·Polyamide (PA)			thane glue
					transfers	product)		·Polyurethane (PU)			 Neoprene
					Coatings such as:			·Polyvinyl chloride			cement
					·Polyvinyl chloride			(PVC)			Epoxies
					(PVC)			·Thermoplastic			·Silicone
					·Polyurethane			polyurethane (TPU)			adhesive
					(PU)			·Thermoplastic			·UV-cured
					·UV-cured			elastomer (TPE)			adhesive
								·Styrene ethylene			
								butylene styrene			
								(SEBS)			

XIncludes cases where it is used as a non-woven fabric or felt.

Testing Matrix

Please refer to the AFIRM testing matrix from the link below. Please note that Per- and Polyfluoroalkyl Substances (PFAS) shall be tested for all materials except metals, ceremics, and glass.

https://afirm-group.com/wp-content/uploads/2025/02/2025 AFIRM RSL 2025 0205b.pdf

Change Log for the 2025 AFIRM RSL

CAS No.	Substance / Material	Modification
Various	Azo-amines & Arylamine Salts	Updated test method for leather to EN ISO 17234-1:2024.
Various	Bisphenols	BPA limit in textiles and leather lowered to 10 ppm. BPS, BPB, and BPF limits lowered to 200 ppm in textiles and 800 ppm in leather.
Various	Chlorinated Benzenes and Toluenes	Updated test method to 17137:2024.
556-67-2	Octamethylcyclotetrasiloxane (D4)	
541-02-6	Decamethylcyclopentasiloxane (D5)	Added new category for Cyclosiloxanes restricted under REACH and as SVHCs with limit of 1000 ppm each. Added testing recommendation in the Testing Matrix.
540-97-6	Dodecamethylcyclohexasiloxane (D6)	
Various	Brominated and Organophosphorus Substances	Renamed category from "Flame Retardants" to "Brominated and Organophosphorus Substances" since listed chemicals may have multiple uses.
115-86-6	Triphenyl Phosphate (TPP)	Added Triphenyl Phosphate (TPP) with a 500 ppm limit due to placement on the REACH SVHC list.
Various	Fluorinated Greenhouse Gases	Changed legal reference to Regulation (EU) 2024/573.
Various	Heavy Metals (Jewelry)	Updated test method to ASTM F963-23 as referenced in ASTM F2923:2020 for all metals except Nickel.
Various	Ozone-depleting Substances	Changed legal reference to Regulation (EU) 2024/590.
Various	Per- and Polyfluoroalkyl Substances (PFAS)	Divided PFOS restriction into "PFOS and its salts" and "PFOS-related substances" with new limits. Included PFHXA and its salts and PFHxA-related substance restrictions.
53306-54-0	Bis(2-propylheptyl) phthalate (DPHP)	Added new orthophthalate DPHP with an information reporting requirement.
3896-11-5	UV 326	Added UV Absorber UV 326 with a 1000 ppm limit due to its inclusion on the REACH SVHC list.
Various	Volatile Organic Compounds (VOCs)	VOC substances moved to new Appendix D. Updated section to include existing VOCs from previous RSL versions, added 10 existing RSL substances from other RSL sections that are also VOCs and remain unchanged in;their original categories; and added 22 new VOCs based on hazard trait and ability to test with a single analysis.

2025 MUJI RSL_003 replaces all previous versions.

Please note that changes to substances, limits and test methods compared with the previous version are highlighted in red.

CAS No.	Substance	MUJI Limits	Potential Uses & Additional Information	Suitable Test Method	Reporting Limit				
		Component Materials in Finished Product			Limits above which test results should be reported				
Acetopher	none and 2-Phenyl-2-Propano	I							
98-86-2	Acetophenone	50	Potential breakdown products in EVA foam when using certain cross-	Extraction in acetone or methanol	05				
617-94-7	2-Phenyl-2-Propanol	50 ppm each	linking agents, including Dicumyl Peroxide.	GC/MS, sonication for 30 minutes at 60° C	25 ррт еасп				
Acidic and	l Alkaline Substances								
N/A	pH value	Textiles: 4.0 – 7.5 Leather: Chrome-tanned: 3.2 – 5.5 Other: 3.5 – 7.5	pH value is a characteristic number, ranging from pH 0 to pH 14, which indirectly shows the content of acidic or alkaline substances in a product. pH values less than 7 indicate sources of acidic substances, and values greater than 7 indicate sources of alkaline substances. To avoid irritation or chemical burns to the skin, the pH value of products must be in the range of human skin—approximately pH 5.5. AFIRM recommends the limits cited to comply with global regulations and to minimize the chances of Chromium VI formation during tanning and processing of leather. For chrome-tanned leather, the final fixing bath of the re-tanning process should always have a pH below 4.0 to guard against the formation of Chromium VI. Important: Egypt, Morocco, and the Gulf Cooperation Council (GCC) require pH for leather not lower than 3.5.	Textiles and synthetic coated	N/A				

CAS No.	Substance	MUJI Limits	Potential Uses & Additional Information	Suitable Test Method	Reporting Limit					
Alkylphen	Alkylphenols (APs) Alkylphenol Ethoxylates (APEOs) including all isomers									
Various	Nonylphenol (NP), mixed isomers	Total APs: - 10 ppm - Total APs + APEOs: - 100 ppm	APEOs can be used as or found in detergents, scouring agents, spinning oils, wetting agents, softeners, emulsifying/dispersing agents for dyes and prints, impregnating agents, de-gumming for silk production, dyes and pigment preparations, polyester padding and down/feather fillings. APs are used as intermediaries in the manufacture of APEOs and antioxidants used to protect or stabilize polymers. Biodegradation of APEOs into APs is the main source of APs in the environment. APEOs and formulations containing APEOs are prohibited from use throughout supply chain and manufacturing processes. We acknowledge that residual or trace concentrations of APEOs may still be found at levels exceeding 100 ppm and that more time is necessary for the supply chain to phase them out completely. Recycled products: Contact your brand customer for information about potential exemptions from the limit on NPEOs in recycled textile	Textiles and Leather: EN ISO 21084:2019 Polymers and all other materials: 1 g sample/20 mL THF, sonication for 60 minutes at 70° C, analysis according to EN ISO 21084:2019	Total of NP + OP:					
Various	Octylphenol (OP), mixed isomers			Down (China market only): GB/T 23322-2018 for compliance with GB/T 14272-2021	3 ppm					
Various	Nonylphenol ethoxylates (NPEOs)			All materials except Leather: EN ISO 18254-1:2016 with determination of APEO using LC/MS or LC/MS/MS Leather: Sample prep and analysis using	Total of NPEOs + OPEOs:					
Various	Octylphenol ethoxylates (OPEOs)			EN ISO 18218-1:2023 with quantification according to EN ISO 18254-1:2016 Down (China market only): GB/T 23322-2018 for compliance with GB/T 14272-2021	20 ppm					

CAS No.	Substance	MUJI Limits	Potential Uses & Additional Information	Suitable Test Method	Reporting Limit
Azo-amin	es and Arylamine Salts				
92-67-1	4-Aminobiphenyl				
92-87-5	Benzidine				
95-69-2	4-Chloro-o-toluidine				
91-59-8	2-Naphthylamine				
97-56-3	o-Aminoazotoluene				
99-55-8	2-Amino-4-nitrotoluene				
106-47-8	p-Chloraniline				
615-05-4	2,4-Diaminoanisole				
101-77-9	4,4'-Diaminodiphenylmethane				
91-94-1	3,3'-Dichlorobenzidine				
119-90-4	3,3'-Dimethoxybenzidine			All materials except leather:	
119-93-7	3,3'-Dimethylbenzidine		Azo dyes and pigments are colorants that incorporate one or several azo groups (-N=N-) bound with aromatic compounds. Thousands of azo dyes exist, but only those which degrade to form the listed cleaved amines are restricted.	EN ISO 14362-1:2017 Leather: EN ISO 17234-1:2024 p-Aminoazobenzene: All materials except leather: EN ISO	
838-88-0	3,3'-dimethyl-4,4'-diaminodiphenylmethane				
120-71-8	p-Cresidine	20 ppm each			5 ppm each
101-14-4	4,4'-Methylen-bis(2-chloraniline)	20 ppin each			1 ''
101-80-4	4,4'-Oxydianiline		Azo dyes that release these amines are regulated and should no longer	14362-3:2017	
139-65-1	4,4'-Thiodianiline		be used for dyeing textiles.	Leather:	
95-53-4	o-Toluidine			EN ISO 17234-2:2011	
95-80-7	2,4-Toluenediamine				
137-17-7	2,4,5-Trimethylaniline				
95-68-1	2,4 Xylidine				
87-62-7	2,6 Xylidine				
90-04-0	2-Methoxyaniline (= o-Anisidine)				
60-09-3	p-Aminoazobenzene				
3165-93-3	4-Chloro-o-toluidinium chloride				
553-00-4	2-Naphthylammoniumacetate				
39156-41-7	4-Methoxy-m-phenylene diammonium sulphate				
21436-97-5	2,4,5-Trimethylaniline hydrochloride				

CAS No.	Substance	MUJI Limits	Potential Uses & Additional Information	Suitable Test Method	Reporting Limit						
Bispheno	isphenols										
80-05-7	Bisphenol-A (BPA)	Textiles & Leather: 10 ppm Items intended to come in contact with the mouth: 1 ppm Other Materials: 1000 ppm	BPA may be used in the production of epoxy resins, polycarbonate plastics, flame	Leather: EN ISO 11936:2023							
80-09-1	Bisphenol S (BPS)	Textiles: 200 ppm each Leather: 800 ppm each Limits will likely be reduced further in future revisions of the	along with BPF in polyamide dye-fixing agents and sulfone- and phenol- based leather tanning agents. BPA and BPS can be found in recycled polymeric and paper materials due to polycarbonate plastic and thermal receipt paper made with bisphenols entering waste streams. BPS was added to the REACH SVHC list and may need to be notified to ECHA in leather goods if found above 0.1%. Additional restrictions on the entire class of bisphenols are forthcoming with a new restriction proposal pending in the European Union. AFIRM recommends testing relevant materials for bisphenols according to the Testing Matrix and to begin working with suppliers to replace bisphenols with suitable alternatives in all products.	precipitation prior to analysis with LC/MS	Leather: 10 ppm each All other materials:						
77-40-7	Bisphenol B (BPB)	MUJI RSL based on the best available technology and feasibility within the supply chain. Other materials: 1000 ppm each			o.1 ppm for individual samples ppm for composite samples						
620-92-8	Bisphenol F (BPF)	*Please submit a `Report on the Use of Hazardous Substances` for products intentionally uesd, even if they fall below the specified limits.									

CAS No.	Substance	MUJI Limits	Potential Uses & Additional Information	Suitable Test Method	Reporting Limit						
	rominated & Organophosphorus Substances ormerly Flame Retardants										
84852-53-9	Decabromodiphenyl ethane (DBDPE)										
32534-81-9	Pentabromodiphenyl ether (PentaBDE)										
32536-52-0	Octabromodiphenyl ether (OctaBDE)										
1163-19-5	Decabromodiphenyl ether (DecaBDE)										
Various	All other Polybrominated diphenyl ethers (PBDEs)			All materials: EN ISO 17881-1:2016							
79-94-7	Tetrabromobisphenol A (TBBP A)		With very limited exceptions, flame- retardant substances, including the entire class of organohalogen flame retardants, should no longer be								
59536-65-1	Polybromobiphenyls (PBB)		applied to materials during production. Listed here are examples of flame-retardant substances used								
3194-55-6	Hexabromocyclododecane (HBCDD)		historically across the apparel and footwear industry. It is not intended to								
3296-90-0	2,2-bis(bromomethyl)-1,3-propanediol (BBMP)	10 ppm each	be a complete list. Other flame retardants not applicable to this industry are regulated worldwide by the Stockholm Convention and the Aarhus Protocol, which have been implemented in the European Union under		5 ppm each						
13674-87-8	Tris(1,3-dichloro-isopropyl) phosphate (TDCPP)		the POPs Regulation. The 10 ppm limit is established to account for incidental impurities, byproducts, and contaminants. Flame retardants should not be used for								
25155-23-1	Trixylyl phosphate (TXP)		any other purpose, e.g., as softeners or plasticizers.								
126-72-7	Tris(2,3,-dibromopropyl) phosphate (TRIS)										
545-55-1	Tris(1-aziridinyl)phosphine oxide) (TEPA)			All materials: EN ISO 17881-2:2016							
115-96-8	Tris(2-chloroethyl)phosphate (TCEP)										
5412-25-9	Bis(2,3-dibromopropyl) phosphate (BDBPP)										
115-86-6	Triphenyl phosphate (TPP)	500 ppm	May be used as a flame retardant, an antioxidant for PU materials, or as an alternative plasticizer to orthophthalates. Now included on the REACH SVHC list.	All materials: EN ISO 17881-2:2016	50 ppm						

CAS No.	Substance	MUJI Limits	Potential Uses & Additional Information	Suitable Test Method	Reporting Limit					
Chlorinate	Chlorinated Paraffins									
185535-84-8	Short-chain Chlorinated Paraffins (SCCPs) (C10-C13)	1000 ppm	May be used as softeners, flame retardants, or fat-liquoring agents in	Leather: ISO 18219-1:2021 (SCCP) ISO 18219-2:2021 (MCCP)	100 ppm					
185535-85-9	Medium-chain Chlorinated Paraffins (MCCPs) (C14-C17)	1000 ppm	leatner production; also as a plasticizer in polymer production.	Textiles and all other materials: ISO	100 ppm					

CAS No.	Substance	MUJI Limits	Potential Uses & Additional Information	Suitable Test Method	Reporting Limit						
Chloroph	hlorophenols										
15950-66-0	2,3,4-Trichlorophenol (TriCP)										
933-78-8	2,3,5-Trichlorophenol (TriCP)				0.5 ppm each						
933-75-5	2,3,6-Trichlorophenol (TriCP)			ΔII materials							
95-95-4	2,4,5-Trichlorophenol (TriCP)		Chlorophenols are polychlorinated compounds used as preservatives or pesticides. Pentachlorophenol (PCP), Tetrachlorophenol (TeCP), and								
88-06-2	2,4,6-Trichlorophenol (TriCP)										
609-19-8	3,4,5-Trichlorophenol (TriCP)	0.5 ppm each	Trichlorophenols (TriCP) are sometimes used to prevent mold and kill insects when growing cotton and when storing/transporting fabrics.								
4901-51-3	2,3,4,5-Tetrachlorophenol (TeCP)		PCP, TeCP, and TriCP can also be used as in-can preservatives in print pastes and other chemical mixtures.								
58-90-2	2,3,4,6-Tetrachlorophenol (TeCP)		print pastes and other chemical mixtures.								
935-95-5	2,3,5,6-Tetrachlorophenol (TeCP)										
87-86-5	Pentachlorophenol (PCP) and its salts and esters										

CAS No.	Substance	MUJI Limits	Potential Uses & Additional Information	Suitable Test Method	Reporting Limit							
Chlorinate	Chlorinated Benzenes and Toluenes											
95-49-8	2-Chlorotoluene											
108-41-8	3-Chlorotoluene											
106-43-4	4-Chlorotoluene											
32768-54-0	2,3-Dichlorotoluene											
95-73-8	2,4-Dichlorotoluene											
19398-61-9	2,5-Dichlorotoluene											
118-69-4	2,6-Dichlorotoluene											
95-75-0	3,4-Dichlorotoluene											
2077-46-5	2,3,6-Trichlorotoluene											
6639-30-1	2,4,5-Trichlorotoluene											
76057-12-0	2,3,4,5-Tetrachlorotoluene		Chlorobenzenes and Chlorotoluenes (Chlorinated Aromatic Hydrocarbons) can be used as carriers in the dyeing process of polyester or wool/ polyester fibers. They can also be used as solvents. Cross-contamination from anti-moth agents and poly shipping bags may cause failures.									
875-40-1	2,3,4,6-Tetrachlorotoluene											
1006-31-1	2,3,5,6-Tetrachlorotoluene											
877-11-2	Pentachlorotoluene	Total: 1 ppm		All materials: EN 17137:2024	0.2 ppm each							
541-73-1	1,3-Dichlorobenzene											
106-46-7	1,4-Dichlorobenzene		Important: The Gulf Cooperation Council (GCC) maintains a limit of 1									
87-61-6	1,2,3-Trichlorobenzene		ppm for 1,2-Dichlorobenzene in textiles.									
120-82-1	1,2,4-Trichlorobenzene											
108-70-3	1,3,5-Trichlorobenzene											
634-66-2	1,2,3,4-Tetrachlorobenzene											
634-90-2	1,2,3,5-Tetrachlorobenzene											
95-94-3	1,2,4,5-Tetrachlorobenzene											
608-93-5	Pentachlorobenzene											
118-74-1	Hexachlorobenzene											
5216-25-1	p-Chlorobenzotrichloride											
98-07-7	Benzotrichloride											
100-44-7	Benzyl Chloride											
95-50-1	1,2-Dichlorobenzene	10 ppm]		1 ppm							

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Cyclosilox	anes									
556-67-2	Octamethylcyclotetrasiloxane (D4)	•	that contain silicone, like silicone softeners and those used for prints. They are SVHCs and will be restricted from use in solvents used for dry placing of taytiles, leather, and fur in the	All materials:						
541-02-6	Decamethylcyclopentasiloxane (D5)	1000 ppm each		Ultrasonic extraction with nonchlorinated organic solvent for 30 min at 40°C then GC/MS	50 ppm each					
540-97-6	Dodecamethylcyclohexasiloxane (D6)									
Dimethylfu	Dimethylfumarate									
624-49-7	Dimethylfumarate (DMFu)		DMFu is an anti-mold agent that may be used in sachets in packaging to prevent the buildup of mold, especially during shipping.	All materials: ISO 16186:2021	0.05 ppm					

CAS No.	Substance	MUJI Limits	Potential Uses & Additional Information	Suitable Test Method	Reporting Limit				
Dyes (Forl	Dyes (Forbidden and Disperse)								
2475-45-8	C.I. Disperse Blue 1								
2475-46-9	C.I. Disperse Blue 3								
3179-90-6	C.I. Disperse Blue 7								
3860-63-7	C.I. Disperse Blue 26								
56524-77-7	C.I. Disperse Blue 35A								
56524-76-6	C.I. Disperse Blue 35B								
12222-97-8	C.I. Disperse Blue 102								
12223-01-7	C.I. Disperse Blue 106		Disperse dyes are a class of						
61951-51-7	C.I. Disperse Blue 124		water-insoluble dyes that penetrate the fiber system of synthetic or manufactured fibers and are held in place by physical forces without						
23355-64-8	C.I. Disperse Brown 1	30 ppm each	forming chemical bonds. Disperse dyes are used in synthetic fiber	All materials: DIN 54231:2022	15 ppm each				
2581-69-3	C.I. Disperse Orange 1		(e.g., polyester, acetate, polyamide). Restricted disperse dyes are suspected of causing allergic reactions						
730-40-5	C.I. Disperse Orange 3		and are prohibited from use for dyeing of textiles.						
82-28-0	C.I. Disperse Orange 11								
12223-33-5									
13301-61-6	C.I. Disperse Orange 37/76/59								
51811-42-8	1								
85136-74-9	C.I. Disperse Orange 149								
2872-52-8	C.I. Disperse Red 1								
2872-48-2	C.I. Disperse Red 11								

CAS No.	Substance	MUJI Limits	Potential Uses & Additional Information	Suitable Test Method	Reporting Limit					
Dyes, con	Dyes, continued									
3179-89-3	C.I. Disperse Red 17									
61968-47-6	C.I. Disperse Red 151									
119-15-3	C.I. Disperse Yellow 1									
2832-40-8	C.I. Disperse Yellow 3									
6300-37-4	C.I. Disperse Yellow 7									
6373-73-5	C.I. Disperse Yellow 9									
6250-23-3	C.I. Disperse Yellow 23									
12236-29-2	C.I. Disperse Yellow 39									
54824-37-2	C.I. Disperse Yellow 49									
6858-49-7	O.I. Disposed Foliati									
54077-16-6	C.I. Disperse Yellow 56									
3761-53-3	C.I. Acid Red 26		Disperse dyes are a class of water-insoluble dyes that penetrate the fiber system of synthetic or							
569-61-9	C.I. Basic Red 9									
569-64-2			manufactured fibers and are held in place by physical forces without	A						
2437-29-8	C.I. Basic Green 4	30 ppm each	forming chemical bonds. Disperse dyes are used in synthetic fiber (e.g., polyester, acetate, polyamide).	All materials: DIN 54231:2022	15 ppm each					
10309-95-2			Restricted disperse dyes are suspected of causing allergic reactions							
548-62-9	C.I. Basic Violet 3		and are prohibited from use for dyeing of textiles.							
632-99-5	C.I. Basic Violet 14									
2580-56-5	C.I. Basic Blue 26									
1937-37-7	C.I. Direct Black 38									
2602-46-2	C.I. Direct Blue 6									
573-58-0	C.I. Direct Red 28									
16071-86-6	C.I. Direct Brown 95									
60-11-7	4-Dimethylaminoazobenzene (Solvent Yellow 2)									
6786-83-0	C.I. Solvent Blue 4									
561-41-1	4,4'-bis(dimethylamino)-4"- (methylamino)trityl alcohol									

CAS No.	Substance	MUJI Limits	Potential Uses & Additional Information	Suitable Test Method	Reporting Limit				
Dyes, Nav	Dyes, Navy Blue								
I118685-33-9	Component 1: C39H23ClCrN7O12S ² Na		Navy blue colorants are regulated and prohibited from use for dyeing of	All materials: DIN 54231:2022	15 ppm each				
Not allocated	Component 2: C46H30CrN10O20S2'3Na	''	textiles. Index 611-070-00-2	All Haterials. Diff 34231.2022	то ррпп еаст				

CAS No.	Substance	MUJI Limits	Potential Uses & Additional Information	Suitable Test Method	Reporting Limit
Fluorinate	d Greenhouse Gases				
Various	See Regulation (EU) 2024/573 for a complete list.	0.1 ppm each	Prohibited from use. May be used as foam blowing agents, solvents, fire retardants, and aerosol propellants.	Sample preparation: Purge and trap — thermal desorption or SPME Measurement: GC/MS	0.1 ppm each
Formaldel	nyde				
50-00-0	Formaldehyde	Adults and children: 75 ppm Babies: 16 ppm	Used in textiles as an anti-creasing and anti-shrinking agent. It is also often used in polymeric resins. Important: United Arab Emirates Cabinet Resolution No. (54) restricts Formaldehyde in children's textiles to 20 ppm.	All materials except leather: JIS L 1041-2011 A (Japan Law 112) or EN ISO 14184-1:2011 Leather: EN ISO 17226-2:2019 with EN ISO 17226-1:2021 confirmation method in case of interferences. Alternatively, EN ISO 17226-1:2021 can be used on its own.	16 ppm

CAS No.	Substance	MUJI Limits	Potential Uses & Additional Information	Suitable Test Method	Reporting Limit	
Heavy Met	Heavy Metals (Non-Jewelry) Extractable and Total Content		See Appendix A for separate South Korea KC Mark soluble Heavy Metal requirements.			
7440-36-0	Antimony (Sb)	Extractable: 30 ppm	Found in or used as a catalyst in polymerization of polyester, flame retardants, fixing agents, pigments, and alloys.	All materials except leather: DIN EN 16711-2:2016 Leather: DIN EN ISO 17072-1:2019	Extractable: 3 ppm	
7440-38-2	Arsenic (As)	Extractable: 0.2 ppm Total: 100 ppm	Arsenic and its compounds can be used in preservatives, pesticides, and defoliants for cotton, synthetic fibers, paints, inks, trims, and plastics.	Extractable: All materials except leather: DIN EN 16711-2:2016 Leather: DIN EN ISO 17072-1:2019 Total: All materials except leather: DIN EN 16711-1:2016 Leather: DIN EN ISO 17072-2:2019	Extractable: 0.1 ppm Total: 10 ppm	
7440-39-3	Barium (Ba)	Extractable: 1000 ppm	Barium and its compounds can be used in pigments for inks, plastics, and surface coatings, as well as in dyeing, mordants, filler in plastics, textile finishes, and leather tanning.	All materials except leather: DIN EN 16711-2:2016 Leather: DIN EN ISO 17072-1:2019	Extractable: 100 ppm	
7440-43-9	Cadmium (Cd)	Extractable: 0.1 ppm Total: 40 ppm	Cadmium compounds may be used as pigments (especially in red, orange, yellow and green); as a stabilizer for PVC; and in fertilizers, biocides, and paints.	Extractable: All materials except leather: DIN EN 16711-2:2016 Leather: DIN EN ISO 17072-1:2019 Total: All materials except leather: DIN EN 16711-1:2016 Leather: DIN EN ISO 17072-2:2019	Extractable: 0.05 ppm Total: 5 ppm	

CAS No.	Substance	MUJI Limits	Potential Uses & Additional Information	Suitable Test Method	Reporting Limit	
Heavy Me	etals (Non-Jewelry), contin	ued	See Appendix A for separate South Korea KC Mark soluble Heavy Metal requirements.			
7440-47-3	Chromium (Cr)	Extractable: Textiles: Adults and children: 2 ppm Babies: 1 ppm	Chromium compounds can be used as dyeing additives; dye-fixing agents; colorfastness after- treatments; dyes for wool, silk, and polyamide (especially dark shades); and leather tanning. Important: Egypt restricts extractable Chromium to 2 ppm in leather products for babies and 200 ppm in leather products for other ages.	Textiles: DIN EN 16711-2:2016 Leather: EN ISO 17072-1:2019	Extractable: 0.5 ppm	
18540-29-9	Chromium VI	Extractable: Leather: 3 ppm Textiles: 1 ppm	Though typically associated with leather tanning, Chromium VI also may be used in the "after-chroming" process for wool dyeing (Chrome salts applied to acid-dyed wool to improve fastness).	Textiles: DIN EN 16711-2:2016 with EN ISO 17075-1:2017 if Cr is detected Leather: EN ISO 17075-1:2017 and EN ISO 17075-2:2017 for confirmation in case the extract causes interference. Alternatively, EN ISO 17075-2:2017 may be used on its own. Ageing test: ISO 10195:2018 Method A2 is used at brand discretion.	Extractable: Leather: 3 ppm Textiles: 0.5 ppm	
7440-48-4	Cobalt (Co)	Extractable: Adults: 4 ppm Children and babies: 1 ppm	Cobalt and its compounds can be used in alloys, pigments, dyestuff, and the production of plastic buttons.	All materials except leather: DIN EN 16711-2:2016 Leather: DIN EN ISO 17072-1:2019	Extractable: 0.5 ppm	
7440-50-8	Copper (Cu)	Extractable: Adults: 50 ppm Children and babies: 25 ppm	Extractable: Adults: 50 ppm Children and babies: 25 ppm	All materials except leather: DIN EN 16711-2:2016 Leather: DIN EN ISO 17072-1:2019	Extractable: 5 ppm	

CAS No.	Substance	MUJI Limits	Potential Uses & Additional Information	Suitable Test Method	Reporting Limit
Heavy Me	etals (Non-Jewelry), contin	ued	See Appendix A for separate South Korea KC Mark soluble Heavy Metal requirements.		
7439-92-1	Lead (Pb)	Extractable: Adults: 1 ppm Children and babies: 0.2 ppm Total: 90 ppm	May be associated with alloys, plastics, paints, inks, pigments and surface coatings. Crystal or "lead glass" is exempt from total Lead restrictions.	Extractable: All materials except leather: DIN EN 16711-2:2016 Leather: DIN EN ISO 17072-1:2019 Total: Non-metal: CPSC-CH-E1002-08.3 Metal: CPSC-CH-E1001-08.3 Lead in paint and surface coatings: CPSC-CH-E1003-09.1	
7439-97-6	Mercury (Hg)	Extractable: 0.02 ppm Total: 0.5 ppm	Mercury compounds can be present in pesticides and as contaminants in caustic soda (NaOH). They may also be used in paints and as catalysts in the manufacture of PU and vinyl chloride for use in PVC.	Extractable: All materials except leather: DIN EN 16711-2:2016 Leather: DIN EN ISO 17072-1:2019 Total: All materials except leather: DIN EN 16711-1:2016 Leather: DIN EN ISO 17072-2:2019	Extractable: 0.02 ppm Total: 0.1 ppm
7440-02-0	Nickel (Ni)	Extractable: 1 ppm Release (metal parts): Prolonged skin contact: 0.5 µg/cm²/week Eyewear frames: 0.5 µg/cm²/week	Nickel and its compounds can be used for plating alloys and improving corrosion-resistance and hardness of alloys. They can also occur as impurities in pigments and alloys.	Extractable: All materials except leather: DIN EN 16711-2:2016 Leather: DIN EN ISO 17072-1:2019 Release: EN 12472:2020 and EN 1811:2023 Release (eyewear frames): EN 16128:2015	
7782-49-2	Selenium (Se)	Extractable: 500 ppm	May be found in synthetic fibers, paints, inks, plastics and metal trims.	All materials except leather: DIN EN 16711-2:2016 Leather: DIN EN ISO 17072-1:2019	Extractable: 50 ppm

CAS No.	Substance	MUJI Limits	Potential Uses & Additional Information	Suitable Test Method	Reporting Limit	
Heavy Me	etals (Jewelry)		Sample preparation for jewelry and wearables: Wax areas not intended for skin- contact: EN 1811:2011+A1:2015			
7440-36-0	Antimony (Sb)	Paints & Coatings: Extractable: 60 ppm	Antimony and its compounds can be used as a Flame Retardant in paints, as well as a colorant in pigments.	ASTM F963-23 as referenced in ASTM F2923:2020	Extractable: 5 ppm	
7440-38-2	Arsenic (As)	Paints & Coatings: Extractable: 25 ppm	Arsenic and its compounds can be used in paints and inks.	ASTM F963-23 as referenced in ASTM F2923:2020	Extractable: 5 ppm	
7440-39-3	Barium (Ba)	Paints & Coatings: Extractable 1000 ppm	Barium and its compounds can be used in pigments for inks	ASTM F963-23 as referenced in ASTM F2923:2020	Extractable: 100 ppm	
7440-43-9	Cadmium (Cd)	Substrates, Paints & Coatings: Total: Adults: 75 ppm Children: 40 ppm	Cadmium and its compounds are used as pigments (especially in red, orange, yellow, and green). It can also be used in alloys to improve hardness or be found as a contaminant	ASTM F963-23 as referenced in ASTM F2923:2020	Total: 5 ppm	
7440-47-3	Chromium (Cr)	Paints & Coatings: Extractable: 60 ppm	Chromium and its compounds can be used as pigments in paints. It can also be used as part of alloys such as stainless steel.	ASTM F963-23 as referenced in ASTM F2923:2020	Extractable: 5 ppm	
7439-92-1	Lead (Pb)	Substrates, Paints & Coatings: Total: 90 ppm	Lead and its compounds may be associated with plastics, paints, inks, pigments, and surface coatings. It can also be found in metals as a contaminant. Crystal or "lead glass" is exempt from total Lead restrictions.	ASTM F963-23 as referenced in ASTM F2923:2020	Total: 10 ppm	
Heavy Met	tals (Jewelry), continued					
7439-97-6	Mercury (Hg)	Paints & Coatings: Extractable: 60 ppm	Mercury and its compounds may be used in paints and can be found as a contaminant in alloys and in gold due to its use during the extraction process.	ASTM F963-23 as referenced in ASTM F2923:2020	Extractable: 5 ppm	
7440-02-0	Nickel (Ni)	Release (metal parts): Prolonged skin contact: 0.5 µg/cm²/week Pierced part: 0.2 µg/cm²/week	Nickel and its compounds can be used for plating alloys and improving the corrosion-resistance and hardness of alloys. They can also occur as impurities in pigments and alloys.	EN 12472:2020 and EN 1811:2023	Release: Prolonged skin contact: 0.5 µg/cm²/week Pierced part: 0.2 µg/cm²/week	
7782-49-2	Selenium (Se)	Paints & Coatings: Extractable: 500 ppm	Selenium and its compounds may be found in paints and inks.	ASTM F963-23 as referenced in ASTM F2923:2020	Extractable: 50 ppm	

CAS No.	Substance	MUJI Limits	Potential Uses & Additional Information	Suitable Test Method	Reporting Limit
Monomers	3				
100-42-5	Styrene, Free	500 ppm	Styrene copolymers like plastic buttons.	Extraction in Methanol GC/MS, sonication at 60° C for 60 minutes	50 ppm
75-01-4	Vinyl Chloride	1 ppm	Vinyl Chloride is a precursor for polymerization and may be present in various PVC materials like prints, coatings, flip flops, and synthetic leather.	EN ISO 6401:2022	1 ppm
N-Nitrosar	nines				
62-75-9	N-nitrosodimethylamine (NDMA)				
55-18-5	N-nitrosodiethylamine (NDEA)				
621-64-7	N-nitrosodipropylamine (NDPA)				
924-16-3	N-nitrosodibutylamine (NDBA)				
100-75-4	N-nitrosopiperidine (NPIP)	0.5 ppm each	Can be formed as by-product in the production of rubber.	EN ISO 19577:2019 with LC/MS/MS verification if positive	0.5 ppm each
930-55-2	N-nitrosopyrrolidine (NPYR)			·	
59-89-2	N-nitrosomorpholine (NMOR)				
614-00-6	N-nitroso N-methyl N-phenylamine (NMPhA)				
612-64-6	N-nitroso N-ethyl N-phenylamine (NEPhA)				

CAS No.	Substance	MUJI Limits	Potential Uses & Additional Information	Suitable Test Method	Reporting Limit
Organotin	Compounds				
Various	Tributyltin (TBT)				
Various	Triphenyltin (TPhT)	0.5 ppm each			
Various	Dibutyltin (DBT)				
/arious	Dioctyltin (DOT)				
/arious	Monooctyltin (MOT)				
Various	Monobutyltin (MBT)				0.1 ppm each
Various	Tricyclohexyltin (TCyHT)	1 ppm each	Class of chemicals combining tin and organics such as butyl and phenyl groups.		
√arious	Trimethyltin (TMT)		Organotins are predominantly found in the environment as antifoulants in marine paints, but they can also be used as biocides (e.g., antibacterials), catalysts in plastic and glue production, and heat		
/arious	Trioctyltin (TOT)			All materials:	
/arious	Tripropyltin (TPT)			CEN ISO/TS 16179:2012 or EN ISO 22744-1:2020	
/arious	Dimethyltin (DMT)				
/arious	Diphenyltin (DPhT)				
/arious	Dipropyltin (DPT)				
/arious	Monomethyltin (MMT)	Other Organotins:			
/arious	Monophenyltin (MPhT)	1 ppm each			
1461-25-2	Tetrabutyltin (TeBT)				
597-64-8	Tetraethyltin (TeET)				
3590-84-9	Tetraoctyltin (TeOT)				
Ortho-phe	nylphenol				
90-43-7	Ortho-phenylphenol (OPP)	1000 ppm	OPP is used for its preservative properties in leather or as a carrier in polyester dyeing processes.	All materials : EN 17134-2:2023	100 ppm

CAS No.	Substance	MUJI Limits	Potential Uses & Additional Information	Suitable Test Method	Reporting Limit				
Ozone-de	zone-depleting Substances								
Various	See Regulation (EU) 2024/590 for a complete list.	5 ppm	Prohibited from use. Ozone-depleting substances have been used as a foaming agent in PU foams as well as a dry-cleaning agent.	All materials: GC/MS headspace 120° C for 45 minutes	5 ppm				
Per- and F	Polyfluoroalkyl Substances (Pl	FAS)							
Various	All PFAS as measured by total organic fluorine	50 ppm		EN 14582:2016 or ASTM D7359:2023 Methods quantify total fluorine (inorganic + organic). See AFIRM PFAS Phaseout Guidance for additional information about total versus total organic fluorine.	20 ppm for individual sample 50 ppm for max. composite of two samples				
Various	Perfluorooctane Sulfonate (PFOS) and its salts	25 ppb total			25 ppb total				
Various	PFOS-related substances	1000 ppb total		All materials: EN ISO 23702-1:2023 or EN 17681-1:2022 & 17681-2:2022	1000 ppb total				
Various	Perfluorooctanoic Acid (PFOA) and its salts	25 ppb total	PFAS may be used in commercial water-, oil-, and stain-repellent agents as well as in breathable membranes that remove moisture, e.g.,		25 ppb total				
Various	PFOA-related substances	1000 ppb total	PTFE. Refer to Appendix B for a list of PFAS substances and CAS Numbers for which testing can be conducted to indicate whether PFAS chemistry		1000 ppb total				
Various	Perfluorohexane-1-sulphonic acid (PFHxS) and its salts	25 ppb total	is present above restricted levels due to intended use or unintended contamination. See AFIRM PFAS Phaseout Guidance for a recommended testing	Important note: Upon publication by CEN, method prEN	25 ppb total				
Various	PFHxS-related substances	1000 ppb total	approach to ensure compliance with all global regulations using the methods included in this section. Recycled products: Contact MUJI about potential exemptions from the	17681-1:2024 for targeted PFAS analysis will become the recommended method for textiles. Significantly higher findings of various PFAS analytes are possible with	1000 ppb total				
Various	C9-C14 Perfluorocarboxylic acids (PFCAs) and their salts	25 ppb total	limit on total organic fluorine in recycled textile products.	tile products. various PFAS analytes are possible with this method, especially FTOHs. EN ISO 23702-1:2023 will remain the recommended method for leather. Appendix B will be updated and consolidated upon official publication of method prEN 17681-1:2024	25 ppb total				
Various	C9-C14 PFCA-related substances	260 ppb total			260 ppb				
Various	PFHxA and its salts	25 ppb total			25 ppb total				
Various	PFHxA-related substances	1000 ppb total			1000 ppb total				

CAS No.	Substance	MUJI Limits	Potential Uses & Additional Information	Suitable Test Method	Reporting Limit		
Pesticides and Herbicides, Agricultural							
Various	See Appendix C for a complete list.	0.5 ppm each	IMay be found in natural tibers, primarily cotton	All materials: EN ISO 15913:2003 or EPA 8081/EPA 8151A or BVL L 00.00- 34:2010-09	0.5 ppm each		

CAS No.	Substance	MUJI Limits	Potential Uses & Additional Information	Suitable Test Method	Reporting Limit
Phthalate	s				
28553-12-0	Di-Iso-nonylphthalate (DINP)				
117-84-0	Di-n-octylphthalate (DNOP)				
117-81-7	Di(2-ethylhexyl)-phthalate (DEHP)				
26761-40-0	Diisodecylphthalate (DIDP)				
85-68-7	Butylbenzylphthalate (BBP)				
84-74-2	Dibutylphthalate (DBP)				
84-69-5	Diisobutylphthalate (DIBP)				
84-75-3	Di-n-hexylphthalate (DnHP)				
84-66-2	Diethylphthalate (DEP)			Sample preparation for all materials:	
131-11-3	Dimethylphthalate (DMP)				
131-18-0	Di-n-pentyl phthalate (DPENP)				
84-61-7	Dicyclohexyl phthalate (DCHP)		Esters of ortho-phthalic acid (Phthalates) are a class of organic compound commonly added to plastics to increase flexibility. They are sometimes used to facilitate the molding of plastic by decreasing its melting temperature. Phthalates can be found in: Flexible plastic components (e.g., PVC) Print pastesxx		el el
71888-89-6	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich			CPSC-CH-C1001-09.4	
117-82-8	Bis(2-methoxyethyl) phthalate			Measurement: Textiles: GC/MS, EN ISO 14389:2014 (7.1 Calculation based on weight of print only; 7.2 Calculation based on weight of print and textile if print cannot be removed). All materials except textiles: GC/MS	50 ppm each
605-50-5	Diisopentyl phthalate (DIPP)	500 ppm each			
131-16-8	Dipropyl phthalate (DPRP)	Total: 1000 ppm			
27554-26-3	Diisooctyl phthalate (DIOP)		Adhesives Plastic buttons		
68515-50-4	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear		Plastic buttons Plastic sleevings Polymeric coatings		
71850-09-4	Diisohexyl phthalate (DIHxP)				
68515-42-4	1,2-Benzenedicarboxylic acid, di-C7-11- branched and linear alkyl esters (DHNUP)				
84777-06-0	1,2-Benzenedicarboxylic acid Dipentyl ester, branched and linear				
68648-93-1	1,2-Benzenedicarboxylic acid, di-C6-10-alkyl esters or mixed decyl and hexyl and octyl diesters with ³ 0.3% of dihexyl phthalate; 1,2-Benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters;				
68515-51-5	1,2-Benzenedicarboxylic acid, di-C6-10-alkyl esters				
76297-69-9	n-Pentyl-isopentylphthalate (nPIPP)				
26040-51-7	Bis(2-ethylhexyl) tetrabromophthalate				

CAS No.	Substance	MUJI Limits	Potential Uses & Additional Information	Suitable Test Method	Reporting Limit				
Polycyclic	olycyclic Aromatic Hydrocarbons (PAHs)								
83-32-9	Acenaphtene								
208-96-8	Acenaphthylene								
120-12-7	Anthracene								
191-24-2	Benzo(g,h,i)perylene								
36-73-7	Fluorene	①No individual restriction							
206-44-0	Fluoranthene	①+②=Total: 10 ppm	PAHs are natural components of crude oil and are common residues from oil refining. PAHs have a characteristic smell similar to that of car	All materials:AFPS GS 2019 or EN	0.2 ppm each				
193-39-5	Indeno(1,2,3-cd)pyrene		tires or asphalt. Oil residues containing PAHs are added to rubber and plastics as a						
91-20-3	Naphthalene**		softener or extender and may be found in rubber, plastics, lacquers and coatings. PAHs are often found in the outsoles of footwear and in printing pastes for screen prints. PAHs can be present as impurities in Carbon Black. They also may be formed from thermal decomposition of recycled materials during reprocessing						
85-01-8	Phenanthrene								
129-00-0	Pyrene								
66-55-3	Benzo(a)anthracene		Naphthalene: Dispersing agents for textile dyes may contain high residual Naphthalene concentrations due to the use of low-quality						
0-32-8	Benzo(a)pyrene								
205-99-2	Benzo(b)fluoranthene		Naphthalene derivatives (e.g., poor- quality Naphthalene Sulphonate Formaldehyde condensation products).						
192-97-2	Benzo[e]pyrene	②1 ppm each Child care articles:	r omidacing ac contact sation products).						
205-82-3	Benzo[j]fluoranthene	0.5 ppm each 1 + 2 = Total: 10 ppm							
207-08-9	Benzo(k)fluoranthene								
218-01-9	Chrysene								
53-70-3	Dibenzo(a,h)anthracene								
Quinoline									
91-22-5	Quinoline	50 ppm	Found as an impurity in polyester and some dyestuffs. Quinoline can be included with disperse dye testing, as the same method is used for both. It is not expected in non-dyed materials.	All materials: DIN 54231:2022 with methanol extraction at 70° C	10 ppm				

CAS No.	Substance	MUJI Limits	Potential Uses & Additional Information	Suitable Test Method	Reporting Limit				
Solvents a	olvents and Residuals								
68-12-2	Dimethylformamide (DMFa)	500 ppm	Solvent used in plastics, rubber, and polyurethane (PU) coating. Water-based PU does not contain DMFa and is therefore preferable.						
75-12-7	Formamide		Byproduct in the production of EVA foams. Taiwan CNS 15493: BSMI may enforce a limit of 200 ppm in yoga mats under authority of the Consumer Protection Act.		50 ppm each				
127-19-5	Dimethylacetamide (DMAC)	1000 ppm each	Solvent used in the production of elastane fibers and sometimes as substitute for DMFa.						
872-50-4	N-Methyl-2-pyrrolidone (NMP)		Industrial solvent used in production of water-based polyurethanes and other polymeric materials. May also be used as a surface treatment for textiles, resins, and metal-coated plastics, or as a paint stripper.						
UV Absorl	bers / Stabilizers				•				
3846-71-7	UV 320			ISO 24040:2022 with extraction in					
3864-99-1	UV 327		Difference and with a control of the						
3896-11-5	UV 326	1000 ppm each	PU foam materials such as open cell foams for padding. Used as UV Absorbers for plastics (PVC, PET, PC, PA, ABS, and other polymers),						
25973-55-1	UV 328		rubber, polyurethane.						
36437-37-3	UV 350			THF, analysis by GC/MS	100 ppm each				
2440-22-4	Drometrizole	For informational purposes only. AFIRM recommends testing to assess content levels.	Used as UV Absorbers for plastics (PVC, PET, PC, PA, ABS, and other polymers), rubber, and polyurethane.						

CAS No.	Substance	MUJI Limits	Potential Uses & Additional Information	Suitable Test Method	Reporting Limit				
Volatile O	olatile Organic Compounds (VOCs)								
71-43-2	Benzene	5 ppm	The VOCs in Appendix D represent a broad range of potentially harmful		Benzene: 5 ppm				
Various	Other: See Appendix D for a complete list.	Total: 500 ppm	substances that can be semiquantified using the prescribed headspace method. Upon conducting this test, substances that also appear in other sections of the RSL with specific test methods and limit values may be detected, and further testing may be appropriate to assess product conformance. The substances in Appendix D should not be used in textile auxiliary chemical preparations. They are associated with solvent-based processes such as solvent-based polyurethane coatings, glues/adhesives, and polymer manufacturing. They should not be used for any kind of facility or spot cleaning. Individual VOCs should be reported if found > 100 ppm and confirmation testing may be required, especially for substances also included in other sections of the RSL with dedicated limits. MUJI will come out with additional guidance on testing VOCs in the near future.		Other: 100 ppm each				

CAS No.	Substance	MUJI Limits	Potential Uses & Additional Information	Suitable Test Method	Reporting Limit					
Appendix	ppendix A. South Korea KC Mark Soluble Heavy Metal Requirements									
	TE: South Korea KC Mark requirements apply to the migration of Heavy Metals from surface coatings/paints, synthetic resins, and paper materials in products intended to be aced in the mouth of children and products intended for infants.									
7440-36-0	Antimony (Sb)	60 ppm	Found in or used as a catalyst in polymerization of polyester, flame retardants, fixing agents, pigments, and alloys.							
7440-38-2	Arsenic (As)	25 ppm	Arsenic and its compounds can be used in preservatives, pesticides, and defoliants for cotton, synthetic fibers, paints, inks, trims, and plastics.							
7440-39-3	Barium (Ba)	1000 ppm	Barium and its compounds can be used in pigments for inks, plastics, and surface coatings, as well as in dyeing, mordants, filler in plastics, textile finishes, and leather tanning.							
7440-43-9	Cadmium (Cd)	75 ppm	Cadmium compounds may be used as pigments (especially in red, orange, yellow and green); as a stabilizer for PVC; and in fertilizers, biocides, and paints.	ISO 8124-3:2020 with Amendment						
7440-47-3	Chromium (Cr)	60 ppm	Chromium compounds can be used as dyeing additives; dye-fixing agents; colorfastness after- treatments; dyes for wool, silk, and polyamide (especially dark shades); and leather tanning.	1 of 202						
7439-92-1	Lead (Pb)	90 ppm	May be associated with alloys, plastics, paints, inks, pigments and surface coatings.]						
7439-97-6	Mercury (Hg)	60 ppm	Mercury compounds can be present in pesticides and as contaminants in caustic soda (NaOH). They may also be used in paints and as catalysts in the manufacture of PU and vinyl chloride for use in PVC.							
7782-49-2	Selenium (Se)	500 ppm	May be found in synthetic fibers, paints, inks, plastics and metal trims.							

CAS No.	Substance	MUJI Limits	Potential Uses & Additional Information	Suitable Test Method	Reporting Limit				
Appendix	Appendix B. Per- and Polyfluoroalkyl Substances (PFAS)								
NOTE: This	IOTE: This list is a subset of PFAS and is not exhaustive. Findings would indicate intentional use or significant contamination.								
PFOS and	Its Salts								
251099-16-8	Didecyldimethyl ammonium perfluorooctane sulfonate (PFOS-N(C10H21)2(CH3)2)	Total:25 ppb	-		Total:25 ppb				
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	Total:25 ppb	-		Total:25 ppb				
2795-39-3	Perfluorooctanesulfonic acid, potassium salt (PFOS-K)	Total:25 ppb	-	All material:	Total:25 ppb				
29457-72-5	Perfluorooctanesulfonic acid, lithium salt (PFOS-Li)	Total:25 ppb		EN ISO 23702-1:2023 or EN 17681-1:2022 and	Total:25 ppb				
29081-56-9	Perfluorooctanesulfonic acid, ammonium salt (PFOS-NH4)	Total:25 ppb	-	17681-2:2022	Total:25 ppb				
70225-14-8	Perfluorooctane sulfonate diethanolamine salt (PFOS-NH(OH)2)	Total:25 ppb			Total:25 ppb				
56773-42-3	Perfluorooctanesulfonic acid, tetraethylammonium salt (PFOS-N(C2H5)4)	Total:25 ppb	-		Total:25 ppb				
PFOS-rela	ted Substances								
4151-50-2	N-Ethylperfluoro-1-octanesulfonamide (N-Et-FOSA)	Total: 1000 ppb			Total: 1000 ppb				
31506-32-8	N-Methylperfluoro-1-octanesulfonamide (N-Me-FOSA)	Total: 1000 ppb	-		Total: 1000 ppb				
1691-99-2	2-(N-Ethylperfluoro-1-octanesulfonamido)- ethanol (N-Et-FOSE)	Total: 1000 ppb	-	All material: EN ISO 23702-1:2023 or EN 17681-1:2022 and 17681-2:2022	Total: 1000 ppb				
24448-09-7	2-(N-Methylperfluoro-1-octanesulfonamido)- ethanol (N-Me-FOSE)	Total: 1000 ppb	-		Total: 1000 ppb				
307-35-7	Perfluoro-1-octanesulfonyl fluoride (POSF)	Total: 1000 ppb			Total: 1000 ppb				
754-91-6	Perfluorooctane sulfonamide (PFOSA)	Total: 1000 ppb			Total: 1000 ppb				

CAS No.	Substance	MUJI Limits	Potential Uses & Additional Information	Suitable Test Method	Reporting Limit
PFOA and	Its Salts			_	
335-67-1	Perfluorooctanoic acid (PFOA)	Total:25 ppb	-		Total:25 ppb
335-95-5	Sodium perfluorooctanoate (PFOA-Na)	Total:25 ppb	-		Total:25 ppb
2395-00-8	Potassium perfluorooctanoate (PFOA-K)	Total:25 ppb	-	All material: EN ISO 23702-1:2023 or	Total:25 ppb
335-93-3	Silver perfluorooctanoate (PFOA-Ag)	Total:25 ppb	-	EN 17681-1:2022 and 17681-2:2022	Total:25 ppb
335-66-0	Perfluorooctanoyl fluoride (PFOA-F)	Total:25 ppb	-	17001-2.2022	Total:25 ppb
3825-26-1	Ammonium pentadecafluorooctanoate (APFO)	Total:25 ppb	-		Total:25 ppb
PFOA-rela	ited Substances				
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	Total: 1000 ppb	-		Total: 1000 ppb
376-27-2	Methyl perfluorooctanoate (Me-PFOA)	Total: 1000 ppb	-		Total: 1000 ppb
3108-24-5	Ethyl perfluorooctanoate (Et-PFOA)	Total: 1000 ppb	-	All material:	Total: 1000 ppb
678-39-7	2-Perfluorooctylethanol (8:2 FTOH)	Total: 1000 ppb	-	EN ISO 23702-1:2023 or EN 17681-1:2022 and	Total: 1000 ppb
27905-45-9	1H,1H,2H,2H-Perfluorodecyl acrylate (8:2 FTA)	Total: 1000 ppb	-	17681-2:2022	Total: 1000 ppb
1996-88-9	1H,1H,2H,2H-Perfluorodecyl methacrylate (8:2 FTMA)	Total: 1000 ppb	-		Total: 1000 ppb
27854-31-5	2H,2H-Perfluorodecanoic acid (H2PFDA)	Total: 1000 ppb	-		Total: 1000 ppb
PFHxS an	d Its Salts				
355-46-4	Perfluorohexane Sulfonic acid (PFHxS)	Total:25 ppb	-		Total:25 ppb
3871-99-6	Perfluorohexane Sulfonic acid, potassium salt (PFHxS-K)	Total:25 ppb	-	All material:	Total:25 ppb
55120-77-9	Perfluorohexane Sulfonic acid, lithium salt (PFHxS-Li)	Total:25 ppb	-	EN ISO 23702-1:2023 or EN 17681-1:2022 and	Total:25 ppb
68259-08-5	Perfluorohexane Sulfonic acid, ammonium salt (PFHxS-NH4)	Total:25 ppb	-	17681-2:2022	Total:25 ppb
82382-12-5	Perfluorohexane Sulfonic acid, sodium salt (PFHxS-Na)	Total:25 ppb	-		Total:25 ppb
PFHxS-rel	ated Substances				
68259-15-4	N-Methylperfluoro-1- hexanesulfonamide (N-Me-FHxSA)	Total: 1000 ppb	-	All material: EN ISO 23702-1:2023 or	Total: 1000 ppb
41997-13-1	Perfluorohexane sulfonamide (PFHxSA)	Total: 1000 ppb	-	EN 17681-1:2022 and 17681-2:2022	Total: 1000 ppb
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CAS No.	Substance	MUJI Limits	Potential Uses & Additional Information	Suitable Test Method	Reporting Limit				
C9 – C14 I	9 – C14 PFCAs and Their Salts								
375-95-1	Perfluorononanoic Acid (PFNA, C9-PFCA)	Total:25 ppb	-		Total:25 ppb				
335-76-2	Perfluorodecanoic Acid (PFDA, C10-PFCA)	Total:25 ppb	-]	Total:25 ppb				
2058-94-8	Perfluoroundecanoic Acid (PFUnA, C11-PFCA)	Total:25 ppb	-	All material:	Total:25 ppb				
307-55-1	Perfluorododecanoic Acid (PFDoA, C12-PFCA)	Total:25 ppb	-	EN ISO 23702-1:2023 or EN 17681-1:2022 and	Total:25 ppb				
72629-94-8	Perfluorotridecanoic Acid (PFTrDA, C13-PFCA)	Total:25 ppb	-	17681-2:2022	Total:25 ppb				
376-06-7	Perfluorotetradecanoic Acid (PFTeDA, C14-PFCA)	Total:25 ppb	-	1	Total:25 ppb				
72155-07-6	Perfluoro-3-7-dimethyloctanecarboxylate (PF-3,7-DMOA)	Total:25 ppb	-]	Total:25 ppb				
C9 – C14 I	PFCA-related Substances								
17741-60-5	1H,1H,2H,2H-Perfluorododecyl acrylate (10:2 FTA)	Total:260 ppb	-		Total:260 ppb				
2144-54-9	1H,1H,2H,2H-Perfluorododecyl methacrylate (10:2 FTMA)	Total:260 ppb	-	1	Total:260 ppb				
865-86-1	1H,1H,2H,2H-Perfluorododecanol (10:2 FTOH)	Total:260 ppb	-]	Total:260 ppb				
34598-33-9	2H,2H,3H,3H-Perufloroundecanoic acid (H4PFUnA)	Total:260 ppb	-	All material:	Total:260 ppb				
378-39-7	Perfluorocylethanol 8:2 (8:2 FTOH)	Total:260 ppb	-	EN ISO 23702-1:2023 or EN 17681-1:2022 and	Total:260 ppb				
39239-77-5	1H,1H,2H,2H-perfluorotetradecan-1-ol (12:2 FTOH)	Total:260 ppb	-	17681-2:2022	Total:260 ppb				
20226-60-0	1H,1H,2H,2H-Perfluorododecanesulphonic acid (10:2 FTS)	Total:260 ppb	-]	Total:260 ppb				
2043-54-1	1H,1H,2H,2H-Perfluorododecyl iodide (10:2 FTI)	Total:260 ppb	-		Total:260 ppb				
0046-31-2	1H,1H,2H,2H-Perfluorotetradecyl iodide (12:2 FTI)	Total:260 ppb	-		Total:260 ppb				

CAS No.	Substance	MUJI Limits	Potential Uses & Additional Information	Suitable Test Method	Reporting Limit
PFHxA, its	salts				
307-24-4	Perfluorohexanoic Acid (PFHxA, C6-PFCA)	Total:25 ppb	-	All material: EN ISO 23702-1:2023 or EN 17681-1:2022 and 17681-2:2022	Total:25 ppb
PFHxA-rel	ated substances				
	1H,1H,2H,2H-Perfluorooctyl acrylate (6:2 FTA)	Total: 1000 ppb	-		Total: 1000 ppb
	1H,1H,2H,2H-Perfluorooctyl methacrylate (6:2 FTMA)	Total: 1000 ppb	-	All material: EN ISO 23702-1:2023 or	Total: 1000 ppb
	1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	Total: 1000 ppb	-	EN 17681-1:2022 and 17681-2:2022	Total: 1000 ppb
647-42-7	1H,1H,2H,2H-Perfluorooctanol (6:2 FTOH)	Total: 1000 ppb			Total: 1000 ppb

CAS No.	Substance	MUJI Limits	Potential Uses & Additional Information	Suitable Test Method	Reporting Limit				
Appendix	ppendix C. Pesticides and Herbicides, Agricultural								
93-72-1	2-(2,4,5-trichlorophenoxy) propionic acid, its salts and compounds; 2,4,5-TP	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm				
93-76-5	2,4,5-T	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm				
94-75-7	2,4-D	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm				
309-00-2	Aldrine	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm				
86-50-0	Azinophosmethyl	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm				
2642-71-9	Azinophosethyl	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm				
4824-78-6	Bromophos-ethyl	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm				
2425-06-1	Captafol	0.5 ppm	May be found in natural fibers, primarily cotton.	All material:	0.5 ppm				
63-25-2	Carbaryl	0.5 ppm	May be found in natural fibers, primarily cotton.	EN ISO 15913:2003 or EPA 8081/EPA 8151A or	0.5 ppm				
510-15-6	Chlorbenzilat	0.5 ppm	May be found in natural fibers, primarily cotton.	BVL L 00.00-34:2010-09	0.5 ppm				
57-74-9	Chlordane	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm				
6164-98-3	Chlordimeform	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm				
470-90-6	Chlorfenvinphos	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm				
1897-45-6	Chlorthalonil	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm				
56-72-4	Coumaphos	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm				
68359-37-5	Cyfluthrin	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm				
91465-08-6	Cyhalothrin	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm				
52315-07-8	Cypermethrin	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm				

CAS No.	Substance	MUJI Limits	Potential Uses & Additional Information	Suitable Test Method	Reporting Limit				
Appendix	ppendix C. Pesticides and Herbicides, Agricultural , continued								
78-48-8	S,S,S-Tributyl phosphorotrithioate (Tribufos)	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm				
52918-63-5	Deltamethrin	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm				
53-19-0	DDD	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm				
72-54-8		о.о ррпі	way be found in natural libers, primarily cotton.		о.о ррт				
3424-82-6	DDE	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm				
72-55-9	-DDE	о.о ррпі	way be found in natural libers, primarily cotton.		о.о ррт				
50-29-3	DDT	0.5 ppm May be found in natural fibers, primarily cotton.	May be found in natural fibers, primarily cotton		0.5 ppm				
789-02-6	-001			о.о ррт					
333-41-5	Diazinone	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm				
1085-98-9	Dichlofluanide	0.5 ppm	May be found in natural fibers, primarily cotton.	All material:	0.5 ppm				
120-36-5	Dichloroprop	0.5 ppm	May be found in natural fibers, primarily cotton.	EN ISO 15913:2003 or EPA 8081/EPA 8151A or	0.5 ppm				
115-32-2	Dicofol	0.5 ppm	May be found in natural fibers, primarily cotton.	BVL L 00.00-34:2010-09	0.5 ppm				
141-66-2	Dicrotophos	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm				
60-57-1	Dieldrine	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm				
60-51-5	Dimethoate	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm				
88-85-7	Dinoseb, its salts and acetate	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm				
63405-99-2	DTTB (4, 6-Dichloro-7 (2,4,5-trichloro-phenoxy)-2-Trifluoro methyl benz imidazole)	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm				
115-29-7	Endosulfan	0.5 ppm	May be found in natural fibers, primarily cotton.	-	0.5 ppm				
959-98-8	Endosulfan I (alpha)	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm				
33213-65-9	Endosulfan II (beta)	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm				
72-20-8	Endrine	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm				

CAS No.	Substance	MUJI Limits	Potential Uses & Additional Information	Suitable Test Method	Reporting Limit				
Appendix	ppendix C. Pesticides and Herbicides, Agricultural , continued								
66230-04-4	Esfenvalerate	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm				
106-93-4	Ethylendibromid	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm				
56-38-2	Ethylparathione; Parathion	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm				
51630-58-1	Fenvalerate	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm				
Various	Halogenated naphthalenes, including polychlorinated naphthalenes (PCNs)	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm				
76-44-8	Heptachlor	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm				
1024-57-3	Heptachloroepoxide	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm				
36355-01-8	Hexabromobiphenyl	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm				
319-84-6	a-Hexachlorocyclohexane with & without Lindane	0.5 ppm	May be found in natural fibers, primarily cotton.	All material:	0.5 ppm				
319-85-7	b-Hexachlorocyclohexane with & without Lindane	0.5 ppm	May be found in natural fibers, primarily cotton.	EN ISO 15913:2003 or EPA 8081/EPA 8151A or	0.5 ppm				
319-86-8	g-Hexachlorocyclohexane with & without Lindane	0.5 ppm	May be found in natural fibers, primarily cotton.	BVL L 00.00-34:2010-09	0.5 ppm				
118-74-1	Hexachlorobenzene	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm				
165-73-6	Isodrine	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm				
1234-79-1	Kelevane	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm				
143-50-0	Kepone	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm				
58-89-9	Lindane	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm				
121-75-5	Malathione	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm				
94-74-6	МСРА	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm				
94-81-5	МСРВ	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm				

CAS No.	Substance	MUJI Limits	Potential Uses & Additional Information	Suitable Test Method	Reporting Limit
Appendix C. Pesticides and Herbicides, Agricultural , continued					
93-65-2	Mecoprop	0.5 ppm	May be found in natural fibers, primarily cotton.	1	0.5 ppm
10265-92-6	Metamidophos	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm
72-43-5	Methoxychlor	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm
2385-85-5	Mirex	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm
6923-22-4	Monocrotophos	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm
298-00-0	Parathion-methyl	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm
1825-21-4	Pentachloroanisole	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm
7786-34-7	Phosdrin/Mevinphos	0.5 ppm	May be found in natural fibers, primarily cotton.	All material: EN ISO 15913:2003 or EPA 8081/EPA 8151A or BVL L 00.00-34:2010-09	0.5 ppm
72-56-0	Perthane	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm
31218-83-4	Propethamphos	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm
41198-08-7	Profenophos	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm
13593-03-8	Quinalphos	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm
82-68-8	Quintozene	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm
8001-50-1	Strobane	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm
297-78-9	Telodrine	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm
8001-35-2	Toxaphene	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm
731-27-1	Tolylfluanide	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm
1582-09-8	Trifluraline	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm

CAS No.	Substance	MUJI Limits	Potential Uses & Additional Information	Suitable Test Method	Reporting Limit
Appendix D. Volatile Organic Compounds (VOCs)					
75-15-0	Carbon Disulfide	Total: 500 ppm			100 ppm each
56-23-5	Carbon Tetrachloride	Total: 500 ppm			100 ppm each
7-66-3	Chloroform	Total: 500 ppm			100 ppm each
08-94-1	Cyclohexanone	Total: 500 ppm			100 ppm each
07-06-2	1,2-Dichloroethane	Total: 500 ppm			100 ppm each
75-35-4	1,1-Dichloroethylene	Total: 500 ppm			100 ppm each
00-41-4	Ethylbenzene	Total: 500 ppm			100 ppm each
76-01-7	Pentachloroethane	Total: 500 ppm	The VOCs in Appendix D represent a broad range of potentially harmful substances that can be		100 ppm each
30-20-6	1,1,1,2- Tetrachloroethane	Total: 500 ppm	semiquantified using the prescribed headspace method. Upon conducting this test, substances that also appear in other sections of		100 ppm each
9-34-5	1,1,2,2- Tetrachloroethane	Total: 500 ppm	the RSL with specific test methods and limit values may be detected, and further testing may be appropriate to assess product conformance.		100 ppm each
27-18-4	Tetrachloroethylene (PERC)	Total: 500 ppm	based processes such as solvent- based polyurethane coatings, glues/ adhesives, and polymer manufacturing. They should not be used for any kind of facility or spot cleaning. Individual VOCs should be reported if found > 100 ppm and confirmation testing may be	100 ppm each	
08-88-3	Toluene	Total: 500 ppm		100 ppm each	
'1-55-6	1,1,1- Trichloroethane	Total: 500 ppm		100 ppm each	
' 9-00-5	1,1,2- Trichloroethane	Total: 500 ppm		100 ppm each	
79-01-6	Trichloroethylene	Total: 500 ppm	RSL with dedicated limits. MUJI will come out with additional guidance on testing VOCs in the near		100 ppm each
330-20-7		Total: 500 ppm	future.	100 ppm each	
08-38-3	Xylenes (meta-, ortho-, para-)	Total: 500 ppm			100 ppm each
5-47-6		Total: 500 ppm			100 ppm each
06-42-3		Total: 500 ppm			100 ppm each
5-50-1	1,2-Dichlorobenzene	Total: 500 ppm			100 ppm each
06-46-7	1,4-Dichlorobenzene	Total: 500 ppm			100 ppm each
72-50-4	1-Methyl-2-pyrrolidione	Total: 500 ppm		-	100 ppm each
17-94-7	2-phenyl-2-propanol	Total: 500 ppm			100 ppm each

CAS No.	Substance	MUJI Limits	Potential Uses & Additional Information	Suitable Test Method	Reporting Limit
Appendix D. Volatile Organic Compounds (VOCs) , continued					
98-86-2	Acetophenone	Total: 500 ppm			100 ppm each
75-12-7	Formamide	Total: 500 ppm			100 ppm each
27-19-5	N,N-Dimethylacetamide (DMAC)	Total: 500 ppm			100 ppm each
91-20-3	Naphthalene	Total: 500 ppm			100 ppm each
68-12-2	N-N-Dimethylformamide (DMFa)	Total: 500 ppm	The VOCs in Appendix D represent a broad range of potentially harmful		100 ppm each
00-42-5	Styrene	Total: 500 ppm	substances that can be semiquantified using the prescribed headspace method. Upon		100 ppm each
6-18-4	1,2,3-trichloropropane	Total: 500 ppm	conducting this test, substances that also appear in other sections of the RSL with specific test methods and limit values may be detected, and further testing may be appropriate to assess product conformance. The substances in Appendix D should not be used in textile		100 ppm each
8-87-5	1,2,Dichloropropane	Total: 500 ppm			100 ppm each
11-15-9	2-Ethoxyethyl acetate	Total: 500 ppm	auxiliary chemical preparations. They are associated with solvent- based processes such as solvent- based polyurethane coatings, glues/	For general VOC screening: GC/MS headspace 45 minutes at 120° C	100 ppm each
49-57-5	2-Ethylhexane acid	Total: 500 ppm	Individual VOCs should be reported if found > 100 ppm and confirmation testing may be required, especially for substances also included in other sections of the RSL with dedicated limits. MUJI will come out with additional guidance on testing VOCs in the near future.	100 ppm each	
62-53-3	Aniline	Total: 500 ppm			100 ppm each
11-96-6	Bis(2-methoxyethyl)ether	Total: 500 ppm		100 ppm each	
8-59-1	Isophorone	Total: 500 ppm		100 ppm each	
08-95-2	Phenol	Total: 500 ppm			100 ppm each
09-99-9	THF	Total: 500 ppm			100 ppm each
06-94-5	1-bromopropane	Total: 500 ppm		-	100 ppm each
0657-70-4	1-PG2MEA 1-Propanol,2-methoxy-, acetate)	Total: 500 ppm			100 ppm each

CAS No.	Substance	MUJI Limits	Potential Uses & Additional Information	Suitable Test Method	Reporting Limit		
Appendix	Appendix D. Volatile Organic Compounds (VOCs) , continued						
111-77-3	2-(2-Methoxyethoxy)ethanol	Total: 500 ppm			100 ppm each		
584-84-9	2,4-toluene diisocyanate	Total: 500 ppm	The VOCs in Appendix D represent a broad range of potentially harmful		100 ppm each		
110-80-5	2-ethoxyethanol	Total: 500 ppm	substances that can be semiquantified using the prescribed headspace method. Upon		100 ppm each		
109-86-4	2-MethoxyethanolEGME (ethylene glycol monomethyl ether)	Total: 500 ppm	conducting this test, substances that also appear in other sections of the RSL with specific test methods and limit values may be detected, and further testing may be appropriate to assess product conformance. The substances in Appendix D should not be used in textile auxiliary chemical preparations. They are associated with solvent-based processes such as solvent- based polyurethane coatings, glues/adhesives, and polymer manufacturing. They should not be used for any kind of facility or spot cleaning. Individual VOCs should be reported if found > 100 ppm and confirmation testing may be required, especially for substances also included in other sections of the RSL with dedicated limits. MUJI will come out with additional guidance on testing VOCs in the near future.		100 ppm each		
1589-47-5	2-Methoxypropan-1-ol	Total: 500 ppm			100 ppm each		
110-71-4	EGDME (Ethylene glycol dimethyl ether)	Total: 500 ppm		For general VOC screening: GC/MS headspace 45 minutes at 120° C	100 ppm each		
110-49-6	EGMEA (Ethylene glycol monomethyl ether acetate)	Total: 500 ppm			100 ppm each		
67-72-1	Hexachloroethane	Total: 500 ppm			100 ppm each		
75-09-2	Merhylene chloride (dichloromethane)	Total: 500 ppm		100 ppm each			
110-54-3	n-hexane	Total: 500 ppm			100 ppm each		
112-49-2	TEGDME(Triethylene glycol dimethyl ether)	Total: 500 ppm			100 ppm each		

SECTION 2: OTHER LIMITS & RESTRICTIONS

CAS No.		Restricted Substances List	Requirement	
Various	California Proposition 65 https://oehha.ca.gov/proposition	n-65/proposition-65-list/	Please submit the 'Report on the Use of Hazardous Substances' to Ryohin Keikaku if substances found on the the list are identified in materials or products.	
Various	(SVHCs)/EU-REACH Subs	stance of Very High Concern List	Ryohin Keikaku requests its suppliers to comply with the Substances of Very High Concern (SVHC) list based on REACH, the EU chemical substances regulation.Please submit the 'Report on the Use of Hazardous Substances' to Ryohin Keikaku if any substance(s) in materials or products contain more than 0.1% (w/w).	
53306-54-0	Bis(2-propylheptyl) phthalate (DPHP)	Suitable Test Method Sample preparation for all materials: CPSC-CH-C1001-09.4 Measurement: Textiles: GC/MS, EN ISO 14389:2022 (8.1 Calculation based on weight of print only; 8.2 Calculation based on weight of print and textile if print cannot be removed). All materials except textiles: GC/MS Reporting Limit:50 ppm	For informational purposes only. Ryohin Keikaku recommends testing to assess content levels. Please submit the 'Report on the Use of Hazardous Substances' to Ryohin Keikaku for intentional use of this substance regardless of concentration.	