MUJI Product Restricted Substances List

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 are avaliable at https://afirm-group.com/wp-content/uploads/2023/04/2023_AFIRM_RSL_2023_0419a.pdf

SECTION 1 : SUBSTANCES PROHIBITED OR REGULATED BY LAW

CAS No.	Substance	MUJI Limits Component Materials in Finished Product	Potential Uses & Additional Information	Suitable Test Method	Reporting Limit Limits above which test results should be reported
Acetophenone and 2-Phenyl-2-Propanol					
98-86-2	Acetophenone	50 ppm each	Potential breakdown products in EVA foam when using certain cross- linking agents, including Dicumyl Peroxide.	Extraction in acetone or methanol GC/MS, sonication for 30 minutes at 60° C	25 ppm each
617-94-7	2-Phenyl-2-Propanol				
Acidic and Alkaline Substances					
N/A	pH value	Textiles: 4.0 – 7.5 Leather: Chrome-tanned: 3.2 – 4.5 Other: 3.5 – 7.0	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. Important: Egypt, Morocco, and the Gulf Cooperation Council (GCC) require pH for leather not lower than 3.5.	Textiles and synthetic coated fabrics: EN ISO 3071:2020 Leather: EN ISO 4045:2018	N/A

CAS No.	Substance	MUJI Limits Component Materials in Finished Product	Potential Uses & Additional Information	Suitable Test Method	Reporting Limit Limits above which test results should be reported
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 products.	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: 3 ppm
Various	Octylphenol (OP), mixed isomers				
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 EN ISO 18218-1:2015 with quantification according to EN ISO 18254-1:2016	Total of NPEOs + OPEOs: 20 ppm
Various	Octylphenol ethoxylates (OPEOs)				

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Azo-amines and Arylamine Salts					
92-67-1	4-Aminobiphenyl	20 ppm each	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. Azo dyes that release these amines are regulated and should no longer be used for dyeing textiles.	All materials except leather: EN ISO 14362-1:2017 Leather: EN ISO 17234-1:2020 p-Aminoazobenzene: All materials except leather: EN ISO 14362-3:2017 Leather: EN ISO 17234-2:2011	5 ppm each
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				
119-93-7	3,3'-Dimethylbenzidine				
838-88-0	3,3'-dimethyl-4,4'-diaminodiphenylmethane				
120-71-8	p-Cresidine				
101-14-4	4,4'-Methylen-bis(2-chloraniline)				
101-80-4	4,4'-Oxydianiline				
139-65-1	4,4'-Thiodianiline				
95-53-4	o-Toluidine				
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				

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Bisphenols					
80-05-7	Bisphenol-A (BPA)	1 ppm Limit is applicable to items intended to come in contact with the mouth; however, see Potential Uses & Additional Information.	BPA may be used in the production of epoxy resins, polycarbonate plastics, flame retardants, and PVC. BPS may be used as a substitute for BPA and can be found 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.	All materials: Extraction: 1 g sample/20 ml THF, sonication for 60 minutes at 60° C, analysis with LC/MS	0.1 ppm for individual samples 1 ppm for composite samples
80-09-1	Bisphenol S (BPS)	1 ppm each			1 ppm each
77-40-7	Bisphenol B (BPB)				
620-92-8	Bisphenol F (BPF)				
1478-61-1	Bisphenol AF (BPAF)				
Chlorinated Paraffins					
85535-84-8	Short-chain Chlorinated Paraffins (SCCPs) (C10-C13)	1000 ppm	May be used as softeners, flame retardants, or fat-liquoring agents in leather production; also as a plasticizer in polymer production.	Leather: ISO 18219-1:2021 (SCCP) ISO 18219-2:2021 (MCCP) Textiles and all other materials: ISO 22818:2021 (SCCP + MCCP)	100 ppm
85535-85-9	Medium-chain Chlorinated Paraffins (MCCPs) (C14-C17)	1000 ppm			100 ppm
Chlorophenols					
15950-66-0	2,3,4-Trichlorophenol (TriCP)	0.5 ppm each	Chlorophenols are polychlorinated compounds used as preservatives or pesticides. Pentachlorophenol (PCP), Tetrachlorophenol (TeCP), and Trichlorophenols (TriCP) are sometimes used to prevent mold and kill insects when growing cotton and when storing/transporting fabrics. PCP, TeCP, and TriCP can also be used as in-can preservatives in print pastes and other chemical mixtures.	All materials: DIN 50009:2021	0.5 ppm each
933-78-8	2,3,5-Trichlorophenol (TriCP)				
933-75-5	2,3,6-Trichlorophenol (TriCP)				
95-95-4	2,4,5-Trichlorophenol (TriCP)				
88-06-2	2,4,6-Trichlorophenol (TriCP)				
609-19-8	3,4,5-Trichlorophenol (TriCP)				
4901-51-3	2,3,4,5-Tetrachlorophenol (TeCP)				
58-90-2	2,3,4,6-Tetrachlorophenol (TeCP)				
935-95-5	2,3,5,6-Tetrachlorophenol (TeCP)				
87-86-5	Pentachlorophenol (PCP) and its salts and esters				

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Chlorinated Benzenes and Toluenes					
95-49-8	2-Chlorotoluene	Total: 1 ppm	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. Important: The Gulf Cooperation Council (GCC) maintains a limit of 1 ppm for 1,2-Dichlorobenzene in textiles.	All materials: EN 17137:2018	0.2 ppm each
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				
875-40-1	2,3,4,6-Tetrachlorotoluene				
1006-31-1	2,3,5,6-Tetrachlorotoluene				
877-11-2	Pentachlorotoluene				
541-73-1	1,3-Dichlorobenzene				
106-46-7	1,4-Dichlorobenzene				
87-61-6	1,2,3-Trichlorobenzene				
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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Dimethylfumarate					
624-49-7	Dimethylfumarate (DMFu)	0.1 ppm	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
Dyes (Forbidden and Disperse /					
2475-45-8	C.I. Disperse Blue 1	30 ppm each	Disperse dyes are a class of water-insoluble dyes that penetrate the fiber system of synthetic or manufactured fibers and are held in place by physical forces without forming chemical bonds. Disperse dyes are used in synthetic fiber (e.g., polyester, acetate, polyamide). Restricted disperse dyes are suspected of causing allergic reactions and are prohibited from use for dyeing of textiles.	All materials: DIN 54231:2022	15 ppm each
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				
61951-51-7	C.I. Disperse Blue 124				
23355-64-8	C.I. Disperse Brown 1				
2581-69-3	C.I. Disperse Orange 1				
730-40-5	C.I. Disperse Orange 3				
82-28-0	C.I. Disperse Orange 11				
12223-33-5	C.I. Disperse Orange 37/76/59				
13301-61-6					
51811-42-8					
85136-74-9	C.I. Disperse Orange 149				
2872-52-8	C.I. Disperse Red 1				
2872-48-2	C.I. Disperse Red 11				

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Dyes, continued					
3179-89-3	C.I. Disperse Red 17	30 ppm each	Disperse dyes are a class of water-insoluble dyes that penetrate the fiber system of synthetic or manufactured fibers and are held in place by physical forces without forming chemical bonds. Disperse dyes are used in synthetic fiber (e.g., polyester, acetate, polyamide). Restricted disperse dyes are suspected of causing allergic reactions and are prohibited from use for dyeing of textiles.	All materials: DIN 54231:2022	15 ppm each
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				
54077-16-6	C.I. Disperse Yellow 56				
3761-53-3	C.I. Acid Red 26				
569-61-9	C.I. Basic Red 9				
569-64-2	C.I. Basic Green 4				
2437-29-8					
10309-95-2					
548-62-9	C.I. Basic Violet 3				
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				

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Dyes, Navy Blue					
118685-33-9	Component 1: C39H23ClCrN7O12S·2Na	30 ppm each	Navy blue colorants are regulated and prohibited from use for dyeing of textiles. Index 611-070-00-2	All materials: DIN 54231:2022	15 ppm each
Not allocated	Component 2: C46H30CrN10O20S2·3Na				
Flame Retardants					
84852-53-9	Decabromodiphenyl ethane (DBDPE)	10 ppm each	With very limited exceptions, flame- retardant substances, including the entire class of organohalogen flame retardants, should no longer be applied to materials during production. Listed here are examples of flame-retardant substances used historically across the apparel and footwear industry. It is not intended to 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 the POPs Regulation. The 10 ppm limit is established to account for incidental impurities, byproducts, and contaminants. Flame retardants should not be used for any other purpose, e.g., as softeners or plasticizers.	All materials: EN ISO 17881-1:2016	5 ppm each
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)				
79-94-7	Tetrabromobisphenol A (TBBP A)				
59536-65-1	Polybromobiphenyls (PBB)				
3194-55-6	Hexabromocyclododecane (HBCDD)				
3296-90-0	2,2-bis(bromomethyl)-1,3-propanediol (BBMP)				
13674-87-8	Tris(1,3-dichloro-isopropyl) phosphate (TDCPP)			All materials: EN ISO 17881-2:2016	
25155-23-1	Trixylyl phosphate (TXP)				
126-72-7	Tris(2,3,-dibromopropyl) phosphate (TRIS)				
545-55-1	Tris(1-aziridinyl)phosphine oxide) (TEPA)				
115-96-8	Tris(2-chloroethyl)phosphate (TCEP)				
5412-25-9	Bis(2,3-dibromopropyl) phosphate (BDBPP)				

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Fluorinated Greenhouse Gases					
Various	See Regulation (EU) No 517/2014 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
Formaldehyde					
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

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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

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Heavy Metals (Non-Jewelry), continued			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	Copper and its compounds can be found in alloys and pigments, and in textiles as an antimicrobial agent. Copper is exempt from restriction limits in Metal parts.	All materials except leather: DIN EN 16711-2:2016 Leather: DIN EN ISO 17072-1:2019	Extractable: 5 ppm

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Heavy Metals (Non-Jewelry), continued			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	Extractable: 0.2 ppm Total: 10 ppm
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 1811:2011+A1:2015 Release (eyewear frames): EN 16128:2015	Extractable: 0.1 ppm Release: 0.5 μg/cm²/ week
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

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Heavy Metals (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 F963-17 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 F963-17 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 F963-17 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 F963-17 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 F963-17 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.	ASTM F963-17 as referenced in ASTM F2923:2020	Total: 10 ppm
Heavy Metals (Non-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 F963-17 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 1811:2011+A1:2015	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 F963-17 as referenced in ASTM F2923:2020	Extractable: 50 ppm

CAS No.	Substance	MUJI Limits Component Materials in Finished Product	Potential Uses & Additional Information	Suitable Test Method	Reporting Limit Limits above which test results should be reported
Monomers					
100-42-5	Styrene, Free	500 ppm	Styrene is a precursor for polymerization and may be present in various Styrene copolymers like plastic buttons. Free styrene is restricted, but total styrene is not.	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 6401:2008	1 ppm
N-Nitrosamines					
62-75-9	N-nitrosodimethylamine (NDMA)	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
55-18-5	N-nitrosodiethylamine (NDEA)				
621-64-7	N-nitrosodipropylamine (NDPA)				
924-16-3	N-nitrosodibutylamine (NDBA)				
100-75-4	N-nitrosopiperidine (NPIP)				
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)				
Organotin Compounds					
Various	Dibutyltin (DBT)	1 ppm each	Class of chemicals combining tin and organics such as butyl and phenyl groups. 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 stabilizers in plastics/rubber. In textiles and apparel, organotins are associated with plastics/ rubber, inks, paints, metallic glitter, polyurethane products and heat transfer material.	All materials: CEN ISO/TS 16179:2012 or EN ISO 22744-1:2020	0.1 ppm each
Various	Dioctyltin (DOT)				
Various	Monobutyltin (MBT)				
Various	Tricyclohexyltin (TCyHT)				
Various	Trimethyltin (TMT)				
Various	Trioctyltin (TOT)				
Various	Tripropyltin (TPT)				
Various	Tributyltin (TBT)	0.5 ppm each			
Various	Triphenyltin (TPhT)				

CAS No.	Substance	MUJI Limits Component Materials in Finished Product	Potential Uses & Additional Information	Suitable Test Method	Reporting Limit Limits above which test results should be reported
Ortho-phenylphenol					
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: DIN 50009:2021	100 ppm
Ozone-depleting Substances					
Various	See Regulation (EC) No 1005/2009 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 Polyfluoroalkyl Substances (PFAS)					
Various	All PFAS as measured by total organic fluorine	50 ppm	Regulations around the world ban the use of PFAS in apparel and footwear, witg partial or full exemptions. PFAS may be used in commercial water-, oil-, and stain-repellent agents as well as in breathable membranes that remove moisture, e.g., 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 is present above restricted levels due to intended use or unintended contamination.	EN 14582:2016 or ASTM D7359:2018	50 ppm total
Various	Perfluorooctane Sulfonate (PFOS) and related substances	1 ppm		All materials: EN ISO 23702-1 or EN 17681-1:2022 & 17681-2:2022	1 ppm
Various	Perfluorooctanoic Acid (PFOA) and its salts	25 ppb total			25 ppb total
Various	PFOA-related substances	1000 ppb total			1000 ppb total
Various	Perfluorohexane-1-sulphonic acid (PFHxS) and its salts	25 ppb total			25 ppb total
Various	PFHxS-related substances	1000 ppb total			1000 ppb total
Various	C9-C14 Perfluorocarboxylic acids (PFCAs) and their salts	25 ppb total			25 ppb total
Various	C9-C14 PFCA-related substances	260 ppb total			260 ppb total
Various	Other Perfluoroalkyl Carboxylic Acids (PFCAs)	For information purposes only. AFIRM recom- mends testing to assess content levels.			100 ppb total
Pesticides and Herbicides, Agricultural					
Various	See Appendix C for a complete list.	0.5 ppm each	May be found in natural fibers, primarily cotton.	All materials: ISO 15913/DIN 38407 F2 or EPA 8081/EPA 8151A or BVL L 00.00-34:2010-09	0.5 ppm each

CAS No.	Substance	MUJI Limits Component Materials in Finished Product	Potential Uses & Additional Information	Suitable Test Method	Reporting Limit Limits above which test results should be reported
Phthalates					
28553-12-0	Di-Iso-nonylphthalate (DINP)	500 ppm each Total: 1000 ppm	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 Adhesives Plastic buttons Plastic sleevings Polymeric coatings	Sample preparation for all materials: CPSC-CH-C1001-09.4 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
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)				
131-11-3	Dimethylphthalate (DMP)				
131-18-0	Di-n-pentyl phthalate (DPENP)				
84-61-7	Dicyclohexyl phthalate (DCHP)				
71888-89-6	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich				
117-82-8	Bis(2-methoxyethyl) phthalate				
605-50-5	Diisopentyl phthalate (DIPP)				
131-16-8	Dipropyl phthalate (DPRP)				
27554-26-3	Diisooctyl phthalate (DIOP)				
68515-50-4	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear				
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				
776297-69-9	n-Pentyl-isopentylphthalate (nPIPP)				

CAS No.	Substance	MUJI Limits Component Materials in Finished Product	Potential Uses & Additional Information	Suitable Test Method	Reporting Limit Limits above which test results should be reported
Polycyclic Aromatic Hydrocarbons (PAHs)					
83-32-9	Acenaphtene	①No individual restriction 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 tires or asphalt. Oil residues containing PAHs are added to rubber and plastics as a 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 Naphthalene: Dispersing agents for textile dyes may contain high residual Naphthalene concentrations due to the use of low-quality Naphthalene derivatives (e.g., poor- quality Naphthalene Sulphonate Formaldehyde condensation products).	All materials: AFPS GS 2019 or EN 17132 or ISO 16190	0.2 ppm each
208-96-8	Acenaphthylene				
120-12-7	Anthracene				
191-24-2	Benzo(g,h,i)perylene				
86-73-7	Fluorene				
206-44-0	Fluoranthene				
193-39-5	Indeno(1,2,3-cd)pyrene				
91-20-3	Naphthalene**				
85-01-8	Phenanthrene				
129-00-0	Pyrene				
56-55-3	Benzo(a)anthracene	②1 ppm each Child care articles: 0.5 ppm each ①＋②＝Total: 10 ppm			
50-32-8	Benzo(a)pyrene				
205-99-2	Benzo(b)fluoranthene				
192-97-2	Benzo[e]pyrene				
205-82-3	Benzo[j]fluoranthene				
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.	All materials: DIN 54231:2022 with methanol extraction at 70° C	10 ppm

CAS No.	Substance	MUJI Limits Component Materials in Finished Product	Potential Uses & Additional Information	Suitable Test Method	Reporting Limit Limits above which test results should be reported
Solvents 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.	Textiles: EN 17131:2019 All other materials: ISO 16189:2021	50 ppm each
75-12-7	Formamide	1000 ppm each	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.		
127-19-5	Dimethylacetamide (DMAC)		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 Absorbers / Stabilizers					
3846-71-7	UV 320	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), rubber, polyurethane.	ISO 24040 with extraction in THF, analysis by GC/MS	100 ppm each
3864-99-1	UV 327				
25973-55-1	UV 328				
36437-37-3	UV 350				
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 Component Materials in Finished Product	Potential Uses & Additional Information	Suitable Test Method	Reporting Limit Limits above which test results should be reported
Volatile Organic Compounds (VOCs)					
71-43-2	Benzene	5 ppm	These VOCs should not be used in textile auxiliary chemical preparations. They are associated with solvent- based processes such as solvent- based polyurethane coatings and glues/adhesives. They should not be used for any kind of facility cleaning or spot cleaning.	For general VOC screening: GC/MS headspace 45 minutes at 120° C	Benzene: 5 ppm Other: 20 ppm each
75-15-0	Carbon Disulfide	Total: 1000 ppm			
56-23-5	Carbon Tetrachloride				
67-66-3	Chloroform				
108-94-1	Cyclohexanone				
107-06-2	1,2-Dichloroethane				
75-35-4	1,1-Dichloroethylene				
100-41-4	Ethylbenzene				
76-01-7	Pentachloroethane				
630-20-6	1,1,1,2- Tetrachloroethane				
79-34-5	1,1,2,2- Tetrachloroethane				
127-18-4	Tetrachloroethylene (PERC)				
108-88-3	Toluene				
71-55-6	1,1,1- Trichloroethane				
79-00-5	1,1,2- Trichloroethane				
79-01-6	Trichloroethylene				
1330-20-7	Xylenes (meta-, ortho-, para-)				
108-38-3					
95-47-6					
106-42-3					

CAS No.	Substance	MUJI Limits Component Materials in Finished Product	Potential Uses & Additional Information	Suitable Test Method	Reporting Limit Limits above which test results should be reported
Appendix A. South Korea KC Mark Soluble Heavy Metal Requirements					
NOTE: 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 placed 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.	ISO 8124-3:2010	-
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.		
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.		
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 Component Materials in Finished Product	Potential Uses & Additional Information	Suitable Test Method	Reporting Limit Limits above which test results should be reported
Appendix B. Per- and Polyfluoroalkyl Substances (PFAS)					
NOTE: This list is a subset of PFAS and is not exhaustive. Findings would indicate intentional use or significant contamination.					
PFOS and Related Substances					
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	1 ppm	-	All material: EN ISO 23702-1 or EN 17681-1:2022 and 17681-2:2022	Total:1 ppm
2795-39-3	Perfluorooctanesulfonic acid, potassium salt (PFOS-K)	1 ppm	-		Total:1 ppm
29457-72-5	Perfluorooctanesulfonic acid, lithium salt (PFOS-Li)	1 ppm	-		Total:1 ppm
29081-56-9	Perfluorooctanesulfonic acid, ammonium salt (PFOS-NH_4)	1 ppm	-		Total:1 ppm
70225-14-8	Perfluorooctane sulfonate diethanolamine salt (PFOS-$NH(OH)_2$)	1 ppm	-		Total:1 ppm
56773-42-3	Perfluorooctanesulfonic acid, tetraethylammonium salt (PFOS-$N(C_2H_5)_4$)	1 ppm	-		Total:1 ppm
251099-16-8	Didecyldimethyl ammonium perfluorooctane sulfonate (PFOS-N(C10H21)2(CH3)2)	1 ppm	-		Total:1 ppm
4151-50-2	N-Ethylperfluoro-1-octanesulfonamide (N-Et-FOSA)	1 ppm	-		Total:1 ppm
31506-32-8	N-Methylperfluoro-1-octanesulfonamide (N-Me-FOSA)	1 ppm	-		Total:1 ppm
1691-99-2	2-(N-Ethylperfluoro-1-octanesulfonamido)-ethanol (N-Et-FOSE)	1 ppm	-		Total:1 ppm
24448-09-7	2-(N-Methylperfluoro-1-octanesulfonamido)-ethanol (N-Me-FOSE)	1 ppm	-		Total:1 ppm
307-35-7	Perfluoro-1-octanesulfonyl fluoride (POSF)	1 ppm	-		Total:1 ppm
754-91-6	Perfluorooctane sulfonamide (PFOSA)	1 ppm	-		Total:1 ppm
PFOA and Its Salts					
335-67-1	Perfluorooctanoic acid (PFOA)	Total:25 ppb	-	All material: EN ISO 23702-1 or EN 17681-1:2022 and 17681-2:2022	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	-		Total:25 ppb
335-93-3	Silver perfluorooctanoate (PFOA-Ag)	Total:25 ppb	-		Total:25 ppb
335-66-0	Perfluorooctanoyl fluoride (PFOA-F)	Total:25 ppb	-		Total:25 ppb
3825-26-1	Ammonium pentadecafluorooctanoate (APFO)	Total:25 ppb	-		Total:25 ppb

CAS No.	Substance	MUJI Limits Component Materials in Finished Product	Potential Uses & Additional Information	Suitable Test Method	Reporting Limit Limits above which test results should be reported
PFOA-related Substances					
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	Total: 1000 ppb	-	All material: EN ISO 23702-1 or EN 17681-1:2022 and 17681-2:2022	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	-		Total: 1000 ppb
678-39-7	2-Perfluorooctylethanol (8:2 FTOH)	Total: 1000 ppb	-		Total: 1000 ppb
27905-45-9	1H,1H,2H,2H-Perfluorodecyl acrylate (8:2 FTA)	Total: 1000 ppb	-		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 and Its Salts					
355-46-4	Perfluorohexane Sulfonic acid (PFHxS)	Total:25 ppb	-	All material: EN ISO 23702-1 or EN 17681-1:2022 and 17681-2:2022	Total:25 ppb
3871-99-6	Perfluorohexane Sulfonic acid, potassium salt (PFHxS-K)	Total:25 ppb	-		Total:25 ppb
55120-77-9	Perfluorohexane Sulfonic acid, lithium salt (PFHxS-Li)	Total:25 ppb	-		Total:25 ppb
68259-08-5	Perfluorohexane Sulfonic acid, ammonium salt (PFHxS-NH4)	Total:25 ppb	-		Total:25 ppb
82382-12-5	Perfluorohexane Sulfonic acid, sodium salt (PFHxS-Na)	Total:25 ppb	-		Total:25 ppb
PFHxS-related Substances					
68259-15-4	N-Methylperfluoro-1-hexanesulfonamide (N-Me-FHxSA)	Total: 1000 ppb	-	All material: EN ISO 23702-1 or EN 17681-1:2022 and 17681-2:2022	Total: 1000 ppb
41997-13-1	Perfluorohexane sulfonamide (PFHxSA)	Total: 1000 ppb	-		Total: 1000 ppb

CAS No.	Substance	MUJI Limits Component Materials in Finished Product	Potential Uses & Additional Information	Suitable Test Method	Reporting Limit Limits above which test results should be reported
C9 – C14 PFCAs and Their Salts					
375-95-1	Perfluorononanoic Acid (PFNA, C9-PFCA)	Total:25 ppb	-	All material: EN ISO 23702-1 or EN 17681-1:2022 and 17681-2:2022	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	-		Total:25 ppb
307-55-1	Perfluorododecanoic Acid (PFDoA, C12-PFCA)	Total:25 ppb	-		Total:25 ppb
72629-94-8	Perfluorotridecanoic Acid (PFTrDA, C13-PFCA)	Total:25 ppb	-		Total:25 ppb
376-06-7	Perfluorotetradecanoic Acid (PFTeDA, C14-PFCA)	Total:25 ppb	-		Total:25 ppb
172155-07-6	Perfluoro-3-7-dimethyloctanecarboxylate (PF-3,7-DMOA)	Total:25 ppb	-		Total:25 ppb
C9 – C14 PFCA-related Substances					
17741-60-5	1H,1H,2H,2H-Perfluorododecyl acrylate (10:2 FTA)	Total:260 ppb	-	All material: EN ISO 23702-1 or EN 17681-1:2022 and 17681-2:2022	Total:260 ppb
2144-54-9	1H,1H,2H,2H-Perfluorododecyl methacrylate (10:2 FTMA)	Total:260 ppb	-		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	-		Total:260 ppb
678-39-7	Perfluorocylethanol 8:2 (8:2 FTOH)	Total:260 ppb	-		Total:260 ppb
39239-77-5	1H,1H,2H,2H-perfluorotetradecan-1-ol (12:2 FTOH)	Total:260 ppb	-		Total:260 ppb
120226-60-0	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
30046-31-2	1H,1H,2H,2H-Perfluorotetradecyl iodide (12:2 FTI)	Total:260 ppb	-		Total:260 ppb
Other Perfluoroalkyl Carboxylic Acids (PFCAs)					
307-24-4	Perfluorohexanoic Acid (PFHxA, C6-PFCA)	-	-	All material: EN ISO 23702-1 or EN 17681-1:2022 and 17681-2:2022	Total: 1000 ppb

CAS No.	Substance	MUJI Limits Component Materials in Finished Product	Potential Uses & Additional Information	Suitable Test Method	Reporting Limit Limits above which test results should be reported
Appendix 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.	All material: ISO 15913/DIN 38407 F2 or EPA 8081/EPA 8151A or BVL L 00.00-34:2010-09	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.		0.5 ppm
63-25-2	Carbaryl	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm
510-15-6	Chlorbenzilat	0.5 ppm	May be found in natural fibers, primarily cotton.		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 Component Materials in Finished Product	Potential Uses & Additional Information	Suitable Test Method	Reporting Limit Limits above which test results should be reported
Appendix 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.	All material: ISO 15913/DIN 38407 F2 or EPA 8081/EPA 8151A or BVL L 00.00-34:2010-09	0.5 ppm
52918-63-5	Deltamethrin	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm
53-19-0 72-54-8	DDD	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm
3424-82-6 72-55-9	DDE	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm
50-29-3 789-02-6	DDT	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm
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.		0.5 ppm
120-36-5	Dichloroprop	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm
115-32-2	Dicofol	0.5 ppm	May be found in natural fibers, primarily cotton.		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 Component Materials in Finished Product	Potential Uses & Additional Information	Suitable Test Method	Reporting Limit Limits above which test results should be reported
Appendix C. Pesticides and Herbicides, Agricultural , continued					
66230-04-4	Esfenvalerate	0.5 ppm	May be found in natural fibers, primarily cotton.	All material: ISO 15913/DIN 38407 F2 or EPA 8081/EPA 8151A or BVL L 00.00-34:2010-09	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
319-84-6	a-Hexachlorocyclohexane with & without Lindane	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm
319-85-7	b-Hexachlorocyclohexane with & without Lindane	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm
319-86-8	g-Hexachlorocyclohexane with & without Lindane	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm
118-74-1	Hexachlorobenzene	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm
465-73-6	Isodrine	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm
4234-79-1	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	MCPA	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm
94-81-5	MCPB	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm

CAS No.	Substance	MUJI Limits Component Materials in Finished Product	Potential Uses & Additional Information	Suitable Test Method	Reporting Limit Limits above which test results should be reported
Appendix C. Pesticides and Herbicides, Agricultural , continued					
93-65-2	Mecoprop	0.5 ppm	May be found in natural fibers, primarily cotton.	All material: ISO 15913/DIN 38407 F2 or EPA 8081/EPA 8151A or BVL L 00.00-34:2010-09	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.		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	Trifluralin	0.5 ppm	May be found in natural fibers, primarily cotton.		0.5 ppm

SECTION 2 : OTHER LIMITS & RESTRICTIONS

CAS No.	Restricted Substances List	Requirement
Various	California Proposition 65 www.oehha.ca.gov.proposition	Supplier must promptly notify Ryohin Keikaku if substances found on the the list are identified in materials or products.
Various	(SVHCs)/EU–REACH Substance of Very High Concern List https://www.echa.europa.eu/candidate-list-table	Ryohin Keikaku requests its suppliers to comply with the Substances of Very High Concern (SVHC) list based on REACH, the EU chemical substances regulation. Supplier must promptly notify Ryohin Keikaku if any substance(s) in materials or products contain more than 0.1% (w/w).