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	Revision 20240205
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	

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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.	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)	1000 ppm each In preparation for forthcoming restrictions, safer alternatives should be substituted for BPA and other listed bisphenols in all applicable materials. *Please submit a `Report on the Use of Hazardous Substances` for products intentionally uesd, even if they fall below the regulated limt.			1 ppm each	Updated regulated limts and added a reporting request for intentional use.
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: $C_{39}H_{23}ClCrN_7O_{12}S^{-}2Na$	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: $C_{46}H_{30}CrN_{10}O_{20}S_2^{-}3Na$					
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	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	Revision 20240205
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)					

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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	

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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	Revision 20240205
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	Revision 20240205
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	Revision 20240205
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	Revision 20240205
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			
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	Revision 20240205
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	Revision 20240205
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	Revision 20240205
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	Revision 20240205
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	Revision 20240205
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	Revision 20240205
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	Revision 20240205
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).