



GUESS GLOBAL

List of Restricted Substances and Materials



Apparel, Footwear, Accessories & Luggage



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1. INTRODUCTION

GUESS is committed to enhance the sustainability of both its global operations and local communities, and connect customers with more sustainable fashion choices. Building on that commitment, Guess has developed our List of Restricted Substances and Materials (LRSM) as a requirement to our suppliers and as assurance to our customers.

This LRSM identifies the chemicals we will limit or prohibit in our products or in the production process due to their potential impact on consumers, workers and the environment. It provides up-to-date information to our business partners, including direct sources and licensees, on product compliance with international consumer products regulations, to the best of our knowledge.

We continue to monitor changes in legal requirements as well as industry best practices and update this list as necessary. Additionally, we will collaborate and communicate with industry partners to foster these goals.

2. SCOPE

All GUESS branded products must comply with the relevant requirements.

3. BANNED MATERIALS

Type of materials	Remarks
Real Fur	In any part of the garments
Angora Wool	In any part of the garments
Gold	Electroplating of the hardware trims for apparel

4. RESTRICTED MATERIALS

Type of materials	Remarks
<u>Feathers and Down:</u> <ul style="list-style-type: none">- Feather and down is considered as an animal by-product in accordance with the International regulation- No live plucking for duck and goose material Feather and down coming from industrial plucking	Fillings

As for the dated test methods, only the edition cited applies. For undated test methods, the latest edition of the document available applies (including upgrades).



5. ALL PRODUCTS

Characteristic	Test Method*	Requirement
Azo dyes	Textile: EN 14362-1/3 Leather: EN 17234-1/2	Textile: max. 20 mg/kg Leather: max. 20 mg/kg
Carcinogenic dyes	ISO 16373-2	1 mg/kg
Disperse dyes (allergenic)	ISO 16373-2	Do not use
pH	Textile: ISO 3071 Leather: ISO 4045	Textile: 4.0-7.5 Leather: 3.2 – 7.5 ($\Delta\text{pH} \leq 0.7$)
Formaldehyde	Textile: ISO 14184-1; JIS L 1041 Leather: ISO 17226-1 Wood: ISO EN 717-3	Baby: max. 16 mg/kg Adult: max. 75 mg/kg Baby: max. 16 mg/kg Adult: max. 75 mg/kg Adult, no skin contact / max. 300 mg/kg
	[EAc]: GOST 25617 STB ISO 14184-1 ISO 14184.2 Leather:	KIDS SWIMWEAR and UNDERWEAR (first layer): 0-3 years: $\leq 20 \mu\text{g/g}$ 3-18 years: $\leq 75 \mu\text{g/g}$ BEACHWEAR: 0-18 years: $\leq 75 \mu\text{g/g}$ DENIM, KNIT and WOVEN first layer: 0-3 years: : $\leq 20 \mu\text{g/g}$ 3-18 years: $\leq 75 \mu\text{g/g}$ DENIM, KNIT and WOVEN second layer: 0-1 year: : $\leq 20 \mu\text{g/g}$ 1-18 years: $\leq 75 \mu\text{g/g}$ DENIM, KNIT and WOVEN third layer: 0-1 year: : $\leq 20 \mu\text{g/g}$ 1-18 years: $\leq 300 \mu\text{g/g}$ SWEATER (second layer) 0-1 year: : $\leq 20 \mu\text{g/g}$ 1-18 years: $\leq 75 \mu\text{g/g}$ LEATHER $\leq 20 \mu\text{g/g}$



Characteristic	Test Method*	Requirement
	STB ISO 17226-1 GOST ISO 17226-1 GOST ISO 17226-2 Fur: GOST 31280	FUR 0-1 year: : ≤ 20 µg/g 1-18 years: ≤ 75 µg/g
Formaldehyde	[EAc]: GOST 25617 STB ISO 14184-1 ISO 14184.2 Leather: STB ISO 17226-1 GOST ISO 17226-1 GOST ISO 17226-2 Fur: GOST 31280	ADULTS SWIMWEAR, BEACHWEAR and UNDERWEAR (first layer): ≤ 75 µg/g DENIM,KNIT and WOVEN: ≤ 75 µg/g first layer ≤ 300 µg/g second and third layer SWEATER ≤ 300 µg/g second layer ACCESSORIES ≤ 75 µg/g for kerchief and scarf products, handkerchiefs and other similar products ≤ 300 µg/g for gloves, mittens and other similar products LEATHER ≤ 300 µg/g ≤ 75 µg/g for leather lining FUR ≤ 300 µg/g
Phthalates	CPSC-CH-C 1001-09.3, EN 14372	≤ 0.1%
Lead content	CPSC-CH-E1001-08 CPSC-CH-E1002-08 CPSC CH E1003 9.1	Textile, leather, natural and plastic components < 40 mg/kg Metal < 90 mg/kg Paint < 40 mg/kg Glass < 100 mg/kg
Cadmium content	EN 1122	< 50 mg/kg
Chromium VI content	ISO 17075	3.0 mg/kg
Chromium VI content	[EAc]: Leather GOST R ISO 17075 Fur GOST 31280	Leather for KIDS: not allowed Fur for KIDS: 0-1 year: not allowed 1-18 years: ≤ 3.0 mg/kg Leather and Fur for ADULTS: ≤ 3.0 mg/kg



Characteristic	Test Method*	Requirement
Nickel release	EN 1811 (after ageing EN 12472 if coated)	Metal Components <0.50 µg/cm ² /week Body Piercings <0.11 µg/cm ² /week
Arsenic and Mercury content	GB 28480	< 1000 mg/kg
Extractable Cadmium	DIN 54233-3	0.1 mg/kg
Extractable Arsenic	DIN 54233-3	0.2 mg/kg
Extractable Mercury	DIN 54233-3	0.02 mg/kg
Extractable Barium	DIN 54233-3	1000 mg/kg
Extractable Selenium	DIN 54233-3	500 mg/kg
Extractable Nickel	DIN 54233-3	1.0 mg/kg
Extractable Copper	DIN 54233-3	25.0 mg/kg
Extractable Lead	DIN 54233-3	0.2 mg/kg
Extractable Chromium	DIN 54233-3	1.0 mg/kg
Extractable Chromium VI	DIN 54233-3	0.5 mg/kg
Extractable Cobalt	DIN 54233-3	1.0 mg/kg
Extractable Antimony	DIN 54233-3	30.0 mg/kg
Alkylphenols and Alkylphenols ethoxylates (APEO)	Textile; Solvent extraction, GC-MS analysis Leather; ISO/DIS 18218-1 GC-MS analysis	NP/OP: Maximum contamination limit SUM= 10 mg/kg Recycled Content Maximum contamination limit SUM= 50 mg/kg NPEO/OPEO: Maximum contamination limit SUM= 100 mg/kg Recycled Content Maximum contamination limit SUM= 250 mg/kg
Organotin compounds	Textile: ISO 23161 Modified Leather: ISO / TS 16179	Tri-substituted organotin compounds (TBT, TPT, TPhT): max. 0.5 mg/kg DBT, DOT, MBT: max. 1.0 mg/kg
Chlorinated Phenols	EN ISO 17070	PCP, TeCP, TriCP: 0.05 mg/kg OPP: 50 mg/kg
Chlorinated benzenes and toluenes	DIN 54232	Sum Max 1 mg/kg
N,N-Dimetilacetamide (DMA)	GCMS HS	< 20 mg/kg
Acrylonitrile monomer	GC-MS HS	Max 2 mg/dm ³
Dimethylformamide (DMF)	Ultrasound extraction using ethylacetate/GC-MS analysis	< 1000 mg/kg
Polycyclic Aromatic Hydrocarbons (PAH)	ZEK01.4-08	< 1.0 mg/kg
Other Volatile Content	GCMS-HS	< 20 mg/kg Benzene < 5 mg/kg
Odour	GB 18401 section 6.7	Odourless
Isocyanates	ISO 10283, EN 13130-2	< 0.002 mg/dm ³



Characteristic	Test Method*	Requirement
Dimethylfumarate (DMFu)	ISO TS 16186	< 0.1 mg/kg
Pesticides/ Herbicides	US EPA 8081A/8151A	0.2 mg/kg
N-Nitrosamine	GB/T 24153	0.5 mg/kg
Chlorinated solvents	DIN 54232	Max 0.1 mg/kg
Polyfluorinated chemicals (PFOS) (if water repellent treated)	CEN / TS 15968	Long Chain Perfluorinated and Polyfluorinated Chemicals (PFC's): BANNED FROM USE Short Chain Perfluorinated and Polyfluorinated Chemicals (PFC's): 2000 µg/m ²
Short chain chlorinated paraffins (if flame retardant treated)	Method based on ISO/DIS 18219	Sum Max. 0.01 % (100 mg/kg)
Brominated and chlorinated flame retardants (if flame retardant treated)	GB/T 24279	Tris(2-chloroethyl)phosphate (TCEP) : 5 mg/kg Others : 10 mg/kg
Index of Toxicity	GOST P 53485	ACCESSORIES (Kerchief and scarf products, handkerchiefs and other similar products;gloves, mittens and other similar products) In aqueous medium shall be from 70 to 120 percent inclusive In the air medium from 80 to 120 percent inclusive, or the local irritative effect shall be absent UNDERWEAR, SWIMWEAR, BEACHWEAR, DENIM (first-second layer), WOVEN (first-second layer), KNIT (first-second layer), SWEATER (second layer) In aqueous medium shall be from 70 to 120 percent inclusive In the air medium from 80 to 120 percent inclusive Alternatively, the local irritative effect shall be absent.

*All applicable test method in EAC are present in the annex to TR 007, 017.

****CA Prop 65 Requirements:**

Proposition 65 requires businesses to provide warnings to Californians about significant exposures to chemicals that cause cancer, birth defects or other reproductive harm. These chemicals can be in the products that Californians purchase, in their homes or workplaces, or that are released into the environment.

GUESS requires all suppliers to conform to the latest version of the Proposition.

For detailed information& requirements, please visit <https://oehha.ca.gov/proposition-65/proposition-65-list>



6. ADULTS

a. Chemical safety requirements for textile, polymeric and other materials, leather and light industry products made from them

Materials for product manufacturing	Name of determined substance	Requirement	
		water medium, (mg/dm ³), no more than	air medium, (mg/m ³), no more than
Natural materials from vegetative raw materials	Formaldehyde*	-	0.003
Cardboard Artificial (viscose and acetate)	Formaldehyde*	-	0.003
Polyester	Formaldehyde*	-	0.003
Polyamide	Formaldehyde*	-	0.003
	Caprolactam	1.0	0.06
	Hexamethylenediamine	0.01	0.001
Polyacrylonitrile	Formaldehyde*	-	0.003
	Acrylonitrile	2.0	0.03
	Dimethyl formamide	10	0.03
Polyvinylchloride	Formaldehyde*	-	0.003
	Acetone	-	0.003
	Benzene	2.2	0.35
	Toluene	0.01	0.1
	Diethylphthalate	0.5	0.6
	Dibutylphthalate	2.0	0.02
	Diethylbenzene-1,2-dicarbonate	not allowed	not allowed
	Cadmium (Cd)	2.0	0.02
	Zinc (Zn)	0.001	-
	Chloroethane (vinyl chloride)	0.1	-
Polyvinylacetate	Formaldehyde*	0.01	0.01
	Vinyl acetate	-	0.003
Polyolefine	Formaldehyde*	0.2	0.15
	Acetaldehyde	-	0.003
Polyurethane	Formaldehyde*	0.2	0.01
	Ethylene glycol	-	0.002
	Acetaldehyde Toluene diisocyanate	-	0.002
	Benzene	0.01	0.1
	Toluene	0.5	0.6
Polyorganosiloxane (silicones)	Formaldehyde*	-	0.003
	Acetaldehyde	0.2	0.01
	Methanole	3.0	0.5



Materials for product manufacturing	Name of determined substance	Requirement	
		water medium, (mg/dm ³), no more than	air medium, (mg/m ³), no more than
Leather, fur	Formaldehyde*	300	0.003
	Mass fraction of water-washable chrome (VI), mg/kg	- 3.0	- -
Rubber	Formaldehyde*	-	0.003
	Thiuram	0.5	-
	Diocetylphthalate Dibutylphthalate	2.0 not allowed	0.02 not allowed
Extracted chemical elements (depending on colorant)	Arsenic (As)	1.0	-
	Lead (Pb)	1.0	-
	Chromium (Cr)	2.0	-
	Cobalt (Co)	4.0	-
	Copper (Cu)	50.0	-
	Nickel (Ni)	4.0	-

NOTES:

* The content of free formaldehyde shall be determined in all kinds of materials and shall be:

- no more than 75 g/g in clothes and materials for clothes of the first layer, inside layers of footwear, house and beach footwear;
- no more than 300 g/g for other products. The normative is specified without background air pollution.



b. Chemical safety requirements for textile materials and products from them treated with textile-processing chemicals

Name of evolving volatile chemical	Requirements: air medium (mg/m³), no more than
Methylacrylate, Methylmethacrylate, Acetaldehyde	0.01
Styrene	0.002
Xylenes (a mix of isomers)	0.2
Vinyl acetate	0.15
Methanol	0.5
Butanol	0.1
Phenol	0.003
Toluene	0.6

NOTES:

Possibility of random inspection of "phenol" indicators is allowed.

Indicators shall be examined depending on composition of sizing agents being applied.



c. Chemical safety requirements for leather accessories and materials for their manufacturing depending on material composition

Material	Name of emitted substances	Requirements: air medium (mg/m ³), no more than
Natural materials from vegetative raw materials, natural leather	formaldehyde	0.003*
Polyamide	formaldehyde caprolactam hexamethyldiamine	0.003* 0.06 0.001
Polyester	formaldehyde dimethyl terephthalate acetaldehyde	0.003* 0.01 0.01
Polyacrylonitrile	formaldehyde acrylonitrile vinyl acetate	0.003* 0.03 0.15
Polyurethane	formaldehyde toluene diisocyanate acetaldehyde	0.003* 0.002 0.01
Polyvinylchloride	formaldehyde phenol dioctylphthalate dibutylphthalate acetone	0.003* 0.003 0.02 - 0.35
Artificial viscose and acetate	formaldehyde	0.003*
Polyolefin	formaldehyde acetaldehyde	0.003* 0.01
Vinyl acetates (artificial leather)	formaldehyde vinyl acetate dioctylphthalate dibutylphthalate	0.003* 0.15 0.02 not allowed
Artificial leather with polyurethane or polyvinylurethane covering	formaldehyde dibutylphthalate dioctylphthalate	0.003* not allowed 0.02
Rubber	formaldehyde dibutylphthalate dioctylphthalate	0.003* not allowed 0.02
Cardboard	formaldehyde	0.003*

NOTES:

* The content of free formaldehyde shall be determined in all kinds of materials and shall be:

- no more than 75 g/g in clothes and materials for clothes of the first layer, inside layers of footwear, house and beach footwear;

- no more than 300 g/g for other products.

The normative is specified without background air pollution.



7. KIDS

a. Chemical safety requirements for textile materials

Materials for product manufacturing	Name of determined substance	Requirement	
		water medium, (mg/dm ³), no more than	air medium, (mg/m ³), no more than
Natural materials from vegetative raw materials	Formaldehyde*		0.003
Artificial(viscoseandacetate)	Formaldehyde*		0.003
Polyester	Formaldehyde*	-	0.003
	Dimethyl terephthalate	1.5	0.01
	Acetaldehyde	0.2	0.01
Polyamide	Formaldehyde*		0.003
	Caprolactam	0.05	0.06
	Hexamethylenediamine	0.01	0.001
Polyacrylonitrile	Formaldehyde*		0.003
	Acrylonitrile	0.02	0.03
	Dimethyl formamide	10	0.03
	Vinyl acetate	0.2	0.15
Polyvinylchloride	Formaldehyde	1.0	0.003
	Vinyl chloride	0.1	0.01
	Acetone	0.01	0.35
	Benzene	0.5	0.1
	Toluene	2.0	0.6
	Dibutyl phthalate	not allowed	0.02
	Dibutyl phthalate**	0.05	not allowed
	Phenol or the amount of total phenols	0.1	0.003
Vinyl Alcohol	Formaldehyde*		0.003
	Vinyl acetate	0.2	0.15
Polyolefine	Formaldehyde*		0.003
	Acetaldehyde	0.2	0.01

NOTES:

*The aqueous medium - distilled water. Mass fraction of free formaldehyde must comply with the standards provided for each category.

**Only for materials made of natural fibers.



*b. Chemical safety requirements for textile materials and products from them treated with textile-processing chemicals**

Name of evolving volatile chemical	Requirements: air medium (mg/m³), no more than
Xylenes (mixed isomers)	0.05
Methylacrylate	0.02
Methylmethacrylate	0.25
Styrene	0.02
Methanol	0.2
Butanol	0.5
Phenol or the amount of total phenols	**
Vinyl acetate	**
Acetaldehyde	**
Formaldehyde	**

NOTES:

* indicators are examined, depending on the composition of the used coupling agents;

** standards of these indicators must comply with the requirements of Annex 10 of REACH technical regulation.



c. Chemical safety requirements for leather accessories and materials for their manufacturing depending on material composition

Material	Name of emitted substances	Requirements: air medium (mg/m ³), no more than
Natural materials from vegetative raw materials, natural leather	formaldehyde	0.003*
Polyamide	formaldehyde	0.003*
	caprolactam	0.06
	hexamethylenediamine	0.001
Polyester	formaldehyde	0.003*
	dimethyl terephthalate	0.01
	acetaldehyde	0.01
Polyacrylonitrile	formaldehyde	0.003*
	acrylonitrile	0.03
	vinyl acetate	0.15
Polyurethane	formaldehyde	0.003*
	toluene diisocyanate	0.002
	acetaldehyde	0.01
Polyvinylchloride	formaldehyde	0.003*
	phenol	0.003
	dioctylphthalate	0.02
	dibutylphthalate	not allowed
	acetone	0.35
Artificial viscose and acetate	formaldehyde	0.003*
Polyolefin	formaldehyde	0.003*
	acetaldehyde	0.01
Vinyl acetates (artificial leather)	formaldehyde	0.003*
	vinyl acetate	0.15
	dioctylphthalate	0.02
	dibutylphthalate	not allowed
Artificial leather with polyurethane or polyvinylurethane covering	formaldehyde	0.003*
	dibutylphthalate	not allowed
	dioctylphthalate	0.02
Rubber	formaldehyde	0.003*
	dibutylphthalate	not allowed
	dioctylphthalate	0.02
Cardboard	formaldehyde	0.003*



8. JEWELRY

The limits refer to products for adults and have been selected in order to be according to the most authoritative compulsory regulations. Types of materials taken into consideration: metals, glassware and crystalware, plastic materials, wood and pottery; specific limits are not applicable to natural stones.

The below tables don't deal with textile and leather – which certainly can be involved in jewelry products – since the applicable limits for those materials have already been defined in the previous section of the same document.

a. Metal parts

Substance	Test Method	Requirement	Law/Country	Notes
<i>Total Metals</i>				
Cadmium	UNI EN 16711-1:2015 + UNI EN ISO 17294-2:2005	< 100 mg/kg	European Union REACH Regulation (EC) No. 1907/2006 Annex XVII	-
		Prohibited	CNS 15290/Taiwan	-
Lead	UNI EN 16711-1:2015 + UNI EN ISO 17294-2:2005	Total Lead: < 500 mg/kg	European Union REACH Regulation (EC) No. 1907/2006 Annex XVII	For jewellery articles
	UNI EN 16711-1:2015 + UNI EN ISO 17294-2:2005	Total Lead: 100 mg/kg	Statutory Order no. 856 of September 5, 2009 - Denmark	-
	Substrate: CPSC-CH- E1001-08.3 Surface coating: CPSC- CH-E1003-09.1	Total lead: ≤ 100 mg/kg Painted accessories: ≤ 90 mg/kg	USA CPSIA	Requirements for children
	CPSC-CH-E1001-08.3	Total lead: ≤ 40 mg/kg	USA: (not federal) Illinois "The Lead poisoning Prevention Act"	-
<i>Release</i>				
Nickel	Nickel release by UNI EN 1811:2015 and EN 12472:2009	< 0.2 µg/cm ² /week	European Union REACH Regulation (EC) No. 1907/2006 Annex XVII	In any post assemblies which are inserted into pierced ears and other pierced parts of the human body
		≤ 0.5 µg/cm ² /week		Abrasion of coated items shall guarantee the same requirement



Substance	Test Method	Requirement	Law/Country	Notes
<i>Extractable metals</i>				
Antimony	ASTM F 963-11 sec. 4.3.5.2	≤ 60 mg/kg	USA "Standard Consumer Safety Specification for Adult Jewelry" (for paint and similar surface coating materials).	For adults (> 14 years old)
Arsenic	ASTM F 963-11 sec. 4.3.5.2	≤ 25 mg/kg	USA "Standard Consumer Safety Specification for Adult Jewelry" (for paint and similar surface coating materials).	For adults (> 14 years old)
Chromium (total)	ASTM F 963-11 sec. 4.3.5.2	≤ 60 mg/kg	USA "Standard Consumer Safety Specification for Adult Jewelry" (for paint and similar surface coating materials).	For adults (> 14 years old)
Mercury	ASTM F 963-11 sec. 4.3.5.2	≤ 60 mg/kg	USA "Standard Consumer Safety Specification for Adult Jewelry" (for paint and similar surface coating materials).	For adults (> 14 years old)
Selenium	ASTM F 963-11 sec. 4.3.5.2	≤ 500 mg/kg	USA "Standard Consumer Safety Specification for Adult Jewelry" (for paint and similar surface coating materials).	For adults (> 14 years old)
Barium	ASTM F 963-11 sec. 4.3.5.2	≤ 1000 mg/kg	USA "Standard Consumer Safety Specification for Adult Jewelry" (for paint and similar surface coating materials).	For adults (> 14 years old)
Cadmium	ASTM F 963-11 sec. 4.3.5.2	≤ 75 mg/kg	USA "Standard Consumer Safety Specification for Adult Jewelry" (for paint and similar surface coating materials).	For adults (> 14 years old)



b. Glass and crystal parts

Substance	Test Method	Requirement	Law/Country	Notes
<i>Total Metals</i>				
Cadmium	UNI EN 16711-1:2015 + UNI EN ISO 17294- 2:2005	< 100 mg/kg	Netherland: Cadmium decree	-
Lead	UNI EN 16711-1:2015 + UNI EN ISO 17294- 2:2005	Total Lead: < 500 mg/kg	European Union REACH Regulation (EC) No. 1907/2006 Annex XVII	For jewelry; except for crystal glass as defined in Annex I (categories 1, 2, 3 and 4) to Council Directive 69/493/EEC
	UNI EN 16711-1:2015 + UNI EN ISO 17294- 2:2005	Total Lead: 100 mg/kg	Statutory Order no. 856 of September 5, 2009 - Denmark	-
	Substrate: CPSC- CHE1002-08.1 Surface coating: CPSC- CH-E1003-09.1	Total lead: ≤ 100 mg/kg Painted accessories: ≤ 90 mg/kg	USA CPSIA	Requirements for children
	CPSC-CHE1002-08.1	Total lead: ≤ 40 mg/kg	USA: (not federal) Illinois "The Lead poisoning Prevention Act"	-



c. Plastic parts

Substance	Test Method	Requirement	Law/Country	Notes
Phthalates	UNI EN ISO 14389:2014	DBP, DEHP, BBP: ≤ 1000 mg/kg the sum DINP, DIDP, DNOP: ≤ 1000 mg/kg the sum	European Union REACH Regulation (EC) No. 1907/2006 Annex XVII	Requirements for children
	CPSC-CH-C1001-09.3:2010	DBP, DEHP, BBP, DINP, DIDP, DNOP: 1000 mg/kg each	USA CPSIA	Requirements for children
Total Lead	UNI EN 16711-1:2015 + UNI EN ISO 17294-2:2005	Total Lead: < 500 mg/kg	European Union REACH Regulation (EC) No. 1907/2006 Annex XVII	For jewelry
	UNI EN 16711-1:2015 + UNI EN ISO 17294-2:2005	Total Lead: 100 mg/kg	Statutory Order no. 856 of September 5, 2009 - Denmark	-
	Substrate: CPSC-CH-E1001-08.3 /CPSC-CHE1002-08.1 Surface coating: CPSC-CH-E1003-09.1	Total lead: ≤ 100 mg/kg painted accessories: ≤ 90 mg/kg	USA CPSIA	Requirements for children
Total cadmium	UNI EN 16711-1:2015 + UNI EN ISO 17294-2:2005	< 100 mg/kg	European Union REACH Regulation (EC) No. 1907/2006 Annex XVII	-
Polycyclic Aromatic Hydrocarbons (PAH)	AfPS GS 2014:01	≤ 1.0 mg/kg each	European Union REACH Regulation (EC) No. 1907/2006 Annex XVII	-
Organotin compound	Ref. to UNI CEN ISO/TS 16179:2012 (footwear)	DBT, DOT: ≤ 1000 mg/kg of Sn each TBT, TPhT: ≤ 1000 mg/kg of Sn the sum	European Union REACH Regulation (EC) No. 1907/2006 Annex XVII	-
DMF	Solvent extraction and GC-MS analysis	To declare if ≥ 0.1%	European Union REACH Regulation (EC) No. 1907/2006 SVHC	If PU based
Formaldehyde	UNI EN ISO 14184-1:2011	75 mg/kg	-	Not regulated in European Union REACH Regulation (EC) No. 1907/2006
SCCP	Solvent extraction and GC-MS analysis	Not used	Regulation (EC) No 850/2004 (POP)	-



d. Wood parts

Substance	Test Method	Requirement	Law/Country	Notes
Formaldehyde	UNI EN ISO 14184-1:2011	< 16 mg/kg	-	Not regulated in European Union REACH Regulation (EC) No. 1907/2006
Organotin compound	Ref. to UNI CEN ISO/TS 16179:2012 (footwear)	DBT, DOT: ≤ 1000 mg/kg of Sn each TBT TPhT: ≤ 1000 mg/kg of Sn the sum	European Union REACH Regulation (EC) No. 1907/2006 Annex XVII	-
<i>Total Metals</i>				
Mercury	UNI EN 16711-1:2015 + UNI EN ISO 17294-2:2005	< 0.3 mg/kg	European Union REACH Regulation (EC) No. 1907/2006 Annex XVII	-
Arsenic	UNI EN 16711-1:2015 + UNI EN ISO 17294-2:2005	< 3.0 mg/kg	European Union REACH Regulation (EC) No. 1907/2006 Annex XVII	-

e. Ceramic parts

Substance	Test Method	Requirement	Law/Country	Notes
<i>Total Metals</i>				
Lead	UNI EN 16711-1:2015 + UNI EN ISO 17294-2:2005	Total Lead: < 500 mg/kg	European Union REACH Regulation (EC) No. 1907/2006 Annex XVII	For jewelry; except for crystal glass as defined in Annex I (categories 1, 2, 3 and 4) to Council Directive 69/493/EEC
	Substrate: CPSC-CHE1002-08.1 Surface coating: CPSC-CH-E1003-09.1	Total lead: ≤ 100 mg/kg Painted accessories: ≤ 90 mg/kg	USA CPSIA	Requirements for children



f. GB 28480

Substance	Test Method	Requirement	Notes
Nickel	GB/T 19719 and GB/T 28485	< 0.2 µg/cm ² /week	Product for piercing at ear or any other part of human body, or used during healing period of piercing wound
		< 0.5 µg/cm ² /week	Products with long contact to skin, such as: ---- ear rings; ---- necklace, bracelet, hand chain, foot chain, ring; ---- watchcase, watch chain, watch buckle; ---- press button, buckle, rivet, zipper and metal label (if not nailed on to clothing).
		< 0.5 µg/cm ² /week coating	For coating: within two years of normal usage
Arsenic	GB/T 28020	≤ 1000 mg/kg	-
Chromium VI	GB/T 28019	≤ 1000 mg/kg	-
Mercury	GB/T 28020	≤ 1000 mg/kg	-
Lead	GB/T 28020	≤ 1000 mg/kg	-
Cadmium	GB/T 28020	≤ 100 mg/kg	-



9. LIST OF RESTRICTED SUBSTANCES

a. Arylamines

Substance	CAS No.
4-Amino azobenzene	60-09-3
o-Aminoazotoluene	97-56-3
4-Aminodiphenyl	92-67-1
2-Amino-4-nitrotoluene	99-55-8
o-Anisidine	90-04-0
Benzidine	92-87-5
p-Chloroaniline	106-47-8
4-Chloro-o-toluidine	95-69-2
p-Cresidine	120-71-8
2,4-Diaminoanisole	615-05-4
4,4'-Diaminodiphenylmethane	101-77-9
3,3'-Dichlorobenzidine	91-94-1
3,3'-Dimethoxybenzidine	119-90-4
3,3'-Dimethylbenzidine	119-93-7
3,3'-Dimethyl-4,4'-diamino-diphenylmethane	838-88-0
4,4'-Methylene-bis-(2-chloroaniline)	101-14-4
2-Naphthylamine	91-59-8
4,4'-Oxydianiline	101-80-4
4,4'-Thiodianiline	139-65-1
2,4-Toluenediamine	95-80-7
o-Toluidine	95-53-4
2,4,5-Trimethylaniline	137-17-7
2,4-Xylidine (China, Japan only)	95-68-1
2,6-Xylidine (China, Japan only)	87-62-7

b. Phenols

Substance	Individual Listings	CAS No.
PCP	Pentachlorophenol (PCP), its salts and compounds	87-86-5
TeCP	Tetrachlorophenol (TeCP), its salts and compounds 2,3,5,6-TeCP	25167-83-3 935-95-5



c. Phthalates

Substance	CAS No.
Di (2-ethylhexyl) phthalate (DEHP)	117-81-7
Benzyl Butyl phthalate (BBP)	85-68-7
Di-n-butyl phthalate (DBP)	84-74-2
Di-n-octyl phthalate (DNOP)	117-84-0
Di-isononyl phthalate (DINP)	68515-48-0 28553-12-0
Di-isodecyl phthalate (DIDP)	68515-49-1 26761-40-0
Dimethyl phthalate (DMP)	131-11-3
Diethyl phthalate (DEP)	84-66-2
Diisobutyl phthalate (DIBP)	84-69-5
1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP)	68515-42-4
1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP)	71888-89-6
Bis(2-methoxyethyl) phthalate (DMEP)	117-82-8
Diisopentylphthalate (DIPP)	605-50-5
N-pentyl-isopentyl phthalate (NPIPP)	776297-69-9
1,2-Benzenedicarboxylic acid, dipentylester, branched and linear (DPP)	84777-06-0
Di-n-hexyl phthalate (DnHP/DHP)	84-75-3
Dipentyl phthalate	131-18-0
1,2- Benzenedicarboxylic acid. Dihexyl ester. Branched and linear	68515-50-4
1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters; 1,2-benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with $\geq 0.3\%$ of dihexyl phthalate (EC No. 201-559-5)	68515-51-5 68648-93-1

d. Flame Retardants

Substance	CAS No.
Chlorinated paraffins (C10-C13)	85535-84-8
Polybrominated biphenyls (PBBs)	59536-65-1
Heptabromodiphenyl ether (HeptaBDE)	446255-22-7 207122-16-5, 68928-80-3
Hexabromodiphenyl ether (HexaBDE)	68631-49-2, 207122-15-4, 36483-60-0
Tetrabromodiphenyl ether (TetraBDE)	5436-43-1, 40088-47-9



Hexabromocyclododecane (HBCDD)	25637-99-4, 3194-55-6, 134237-50-6, 134237-51-7 , 134237-52-8
Penta-bromodiphenyl ether (pentaBDE)	32534-81-9
Octa-bromodiphenyl ether (octaBDE)	32536-52-0
Tris (2,3-dibromopropyl) phosphate (TRIS)	126-72-7
Bis (2,3-dibromopropyl) phosphate	5412-25-9
Tris (1-aziridinyl)-phosphine oxide (TEPA)	545-55-1
Decabromodiphenyl ether (DecaBDE)	1163-19-5
Tris(2-chloroethyl) phosphate (TCEP)	115-96-8
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	13674-87-8

e. Allergenic Dyes

Substance	CAS No.
Disperse Blue 1	2475-45-8
Disperse Blue 35	12222-75-2
Disperse Blue 106	12223-01-7
Disperse Blue 124	61951-51-7
Disperse Orange 3	730-40-5
Disperse Orange 37/59/76	13301-61-6
Disperse Red 1	2872-52-8
Disperse Yellow 3	2832-40-8
Acid Red 26	3761-53-3
Basic Red 9	569-61-9
Basic Violet 14	632-99-5
Direct Blue 6	2602-46-2
Direct Black 38	1937-37-7
Direct Red 28	573-58-0
Disperse Orange 11	82-28-0

f. Organotin Compounds

Substance	CAS No.
Tributyltin (TBT)	56573-85-4
Triphenyltin (TPHT)	668-34-8
All tri-substituted organotin compounds (including TBT and TPHT)	Various
Dibutyltin (DBT)	1002-53-5
Dioctyltin (DOT)	15231-44-4



g. Pesticides

Substance	CAS No.
2-(2,4,5-trichlorophenoxy) propionic acid, its salts and compounds	93-72-1
2,4,5-trichlorophenoxyacetic acid, its salts and compounds	93-76-5
Aldrin (Switzerland and EU POPs)	309-00-2
Chlordane (Switzerland and EU POPs)	57-74-9
Dichloro-diphenyl-dichloro ethane (DDD)	72-54-8
Dichloro-diphenyl-dichloro ethylene (DDE)	72-55-9
Dichloro-diphenyl-trichloro ethane (DDT) (both Switzerland)	50-29-3
Dieldrin	60-57-1
Endrine	72-20-8
Heptachlorine (Switzerland and EU POPs)	76-44-8
Epoxy-heptachlorine	1024-57-3
Endosulfan and its isomers	115-29-7 959-98-8 33213-65-9
Hexabromobiphenyl	36355-01-8
Pentachlorobenzene	608-93-5
Pentabromobenzene	608-90-2
4,6-Dichloro-7 (2,4,5-trichloro-phenoxy) 0-2-trifluoro methyl benz-imidazole (DTTB)	63405-99-2
Hexachlorobenzene (Switzerland and EU POPs)	118-74-1
Hexachlorocyclohexane (HCH, all isomers) except gamma-hexachlorocyclohexane (except linande [58-89-9] in medical products) (Switzerland and EU POPs)	608-73-1
Isodrin	465-73-6
Kelevane	4234-79-1
Kepone (Chlordecone) (Switzerland and EU POPs)	143-50-0
Methoxychlor	72-43-5
Mirex (Switzerland and EU POPs)	2385-85-5
Perthane	72-56-0
Quintozene	82-68-8
Strobane	8001-50-1
Telodrin	297-78-9
Toxaphene (Switzerland and EU POPs)	8001-35-2
Halogenated biphenyls, including Polychlorinated biphenyl (PCB) (both Switzerland)	1336-36-3 53469-21-9 and Various
Halogenated terphenols, including Polychlorinated terphenyl (PCT)	Various
Halogenated naphthalenes	Various
Halogenated diarylalkanes	Various
Halogenated diphenyl methanes	Various
Monomethyl-dibromo-diphenyl methane	99688-47-8



Monomethyl-dichloro-diphenyl methane	81161-70-8
Monomethyl-tetrachloro-diphenyl methane	76253-60-6
Dimethyl Fumarate	624-49-7

h. Asbestos

Substance	CAS No.
Actinolite	77536-66-4
Amosite	12172-73-5
Anthrophyllite	77536-67-5
Chrysotile	12001-29-5
Crocidolite	12001-28-4
Tremolite	77536-68-6

i. Metals

Substance	CAS No.
Cadmium (Cd)	7440-43-9
Lead (Pb)	7439-92-1
Chromium	7440-47-3
Mercury	7439-97-6
Arsenic	7440-38-2
Copper	7440-50-8
Nickel (Ni)	7440-02-0
Antimony	7440-36-0
Cobalt	7440-48-4
Chromium (Cr6+) hexavalent	18540-29-9

j. Polycyclic Aromatic Hydrocarbons (PAHs)

Substance	CAS No.
Benzo(a)anthracene	56-55-3
Chrysene	218-01-9
Indeno(1,2,3-cd)pyrene	193-39-5
Benzo(b)fluoranthene	205-99-2
Benzo(k)fluoranthene	207-08-9
Benzo(a)pyrene	50-32-8
Dibenzo(a,h)anthracene	53-70-3
Benzo(g,h,i)perylene	191-24-2



Benzo(e)pyrene	192-97-2
Benzo(j)fluoranthene	205-82-3
Acenaphthene	83-32-9
Acenaphthylene	208-96-8
Anthracene	120-12-7
Fluoranthene	206-44-0
Fluorene	86-73-7
Naphthalene	91-20-3
Phenanthrene	85-01-8
Pyrene	129-00-0

k. Misc

Substance	Individual Listings	CAS No.
Formaldehyde	Formaldehyde 0-36 months old	50-00-0
	>36 months old (with direct skin contact)	
	>36 months old (no direct skin contact)	
	Formaldehyde (leather and fur) Baby products (0-24 months)	
	Leather and fur (with direct skin contact)	
	Leather and fur (without direct skin contact)	
	Formaldehyde (infant athletic shoes and skin contact components in children's athletic shoes)	
	Formaldehyde (non-skin contact components on children's athletic shoes)	
	Formaldehyde (Textiles and artificial leather on upper, lining and insole of vulcanized shoes- infant shoes)	
Formaldehyde (Textiles and artificial leather on upper, lining and insole of vulcanized shoes- other shoes)		
Perfluorooctane sulfonate (PFOS)		2795-39-3
Perfluorooctanoic acid (PFOA), its salts and esters		335-67-1, 3825-26-1 335-95-5 2395-00-8 335-66-0 376-27-2 3108-24-5
Blue Colorant		118685-33-9
Nonyl phenol(NP)		Various
Nonyl phenoethoxylates(NPEO)		Various
Octylphenol (OP)		Various
Octylphenol ethoxylate (OPEO)		Various



pH value	-
Vinyl Chloride Monomer (VCM)	75-01-4

10. REVISION LOG

Date	Version	Changes	Section	Content / Remarks
Nov 1, 2018	8 th	Test Method Change/Added Requirement Change/Added	5. All Product	pH Requirement: Baby: max. 16 mg/kg Adult: max. 75 mg/kg Wood Requirement: Adult, no skin contact/max. 300 mg/kg
Nov 1, 2018	8 th	Deleted	5. All Product	Formaldehyde: Textile/Leather/Wood Requirement Deleted
Nov 1, 2018	8 th	Deleted	9. List of Substances	Azo Dyes
Nov 1, 2018	8 th	Deleted	9. List of Substances	Carcinogenic Dyes
Nov 1, 2018	8 th	Deleted	9. List of Substances	Disperse Dyes
Nov 1, 2018	8 th	Deleted/Added	9. List of Substances	Phthalates Deleted: Dipentyl Phthalate, 1,2-Benzenedicarboxylic acid Added: Dinonyl Phthalate (DNP), Di-n-propyl Phthalate (DPRP), Di-cyclohexyl Phthalate (DCHP), Di-iso-octyl Phthalate (DIOP)
Nov 1, 2018	8 th	Deleted/Added	9. List of Substances	Brominated and Chlorinated Flame Retardants Deleted: Tetrabromobisphenol A (TBBPA), 2,2-bis (bromomethyl)-1,3-propanedio (BBMP), Triis (1,3-dichloro-isopropyl) phosphate (TDCP), Bis (2,3-dibromopropylether) of tetrabromobisphenol (BDBPT) Added: Chlorinated Paraffins (C10-C13), Heptabromodiphenyl ether (HeptaBDE), Hexabromodiphenyl ether (HexaBDE), Tetrabromodiphenyl ether (TetraBDE), Tris (1,3-dichloro-2-propyl) phosphate (TDCPP)
Nov 1, 2018	8 th	Deleted	9. List of Substances	Allergenic Dyes
Nov 1, 2018	8 th	Deleted/Added	9. List of Substances	Organotin Compounds



				<p>Deleted: All tri-substituted organotin compounds</p> <p>Added: Dimethyltin (DMT), Monobutyltin (MBT), Monoctyltin (MOT), Tricyclohexyltin (TCyHT), Trioctyltin (TOT), Tripropyltin (TPT), Trimethyltin (TMT), Tetrabutyltin (TebT), Monomethyltin (MMT), Monophenyltin (MPT), Diphenyltin (DPT)</p>
Nov 1, 2018	8 th	Deleted/Added	9. List of Substances	<p>Pesticides/Herbicides</p> <p>Deleted: Hexabromobiphenyl, Pentabromobenzene, 4,6-Dichloro-7-O2-trifluoro methyl benz-imidazole (DTTB), Hexachlorobenzene, Hexachlorocyclohexane (HCH, all isomers), Dimethyl Fumarate</p> <p>Added: Tetrachlorobenzene, Lindane</p>
Nov 1, 2018	8 th	Deleted	9. List of Substances	N-Nitrosamine
Nov 1, 2018	8 th	Deleted	9. List of Substances	Chlorinated Solvents
Nov 1, 2018	8 th	Deleted	9. List of Substances	Polyfluorinated Chemicals
Nov 1, 2018	8 th	Deleted	9. List of Substances	Short Chain Chlorinated Paraffins
Nov 1, 2018	8 th	Added	9. List of Substances	Asbestos
Nov 1, 2018	8 th	Added	9. List of Substances	Metals
Nov 1, 2018	8 th	Added	9. List of Substances	Polycyclic Aromatic Hydrocarbons (PAHs)
Nov 1, 2018	8 th	Added	9. List of Substances	<p><u>Misc</u></p> <p>Formaldehyde</p> <p>Perfluorooctane Sulfonate (PFOS)</p> <p>Perfluorooctanoic acid (PFOA)</p> <p>Blue Colorant</p> <p>Nonyl Phenol (NP)</p> <p>Nonyl Phenoethoxylates (NPEO)</p> <p>Octylphenol (OP)</p> <p>Octylphenol ethoxylate (OPEO)</p> <p>pH Value</p> <p>Vinyl Chloride Monomer (VCM)</p>