



RESTRICTED SUBSTANCE LIST (RSL)

February 2018 | Nineteenth Edition

Contents

Introduction	2
Methodology	3
About AAFA	5
Arylamines	7
Asbestos	8
Dioxins & Furans	9
Disperse Dyes	10
Flame Retardants	11
Fluorinated Greenhouse Gases	13
Metals	14
Miscellaneous	18
Organotin Compounds	21
Pesticides	22
Phthalates	24
Solvents	26
Glossary of Terms	27
Appendix I - Reporting ¹	30
Appendix II- Labeling ²	42
Change Log	43
Disclaimer	44

¹ Appendix I lists regulations which have a reporting requirement that are not necessarily otherwise listed in the RSL.

² Appendix II lists regulations which have a labeling requirement that are not necessarily otherwise listed in the RSL.

Introduction

The Restricted Substance List (RSL) was created by a special working group of the American Apparel & Footwear Association's (AAFA) Environmental Task Force. The RSL is intended to provide apparel and footwear companies with information related to regulations and laws that restrict or ban certain chemicals and substances in finished home textile, apparel, and footwear products around the world.

The RSL was developed to serve as a practical tool to help those individuals in textile, apparel, and footwear companies, and their suppliers, responsible for environmental compliance throughout the supply chain, to become more aware of various national and international regulations governing the amount of substances that are permitted in finished home textile, apparel, and footwear products.

The RSL will be updated on a regular basis and will be supplemented with additional resources to help officials in these companies undertake responsible chemical management practices in the aforementioned finished products.

Methodology

The RSL includes only those materials, chemicals, and substances that are restricted or banned in finished home textile, apparel, and footwear products because of a regulation or law. In each case, the RSL identifies the most restrictive regulation.

The RSL does not include regulations that restrict the use of substances in production processes or in the factory; rather the focus is on whether or not the substance can be found in finished home textile, apparel, and footwear products at a certain level.

A. Structure

For each substance, the RSL identifies the following features:

1. CAS number
2. Common chemical or color name
3. Information on the Restriction/Limit on Final Product or Tested Component
 - a. Restriction Level
 - b. Country where that Restriction/Limit is found
 - c. Test Method (where no test method is stipulated in the regulation, the GAFTI column may suggest one)
 - d. Other countries that maintain equal or less restrictions
 - e. Comments (if applicable)

B. What is Included and What is Not

The RSL is not intended to address product safety regulations outside the chemical management area – such as Consumer Product Safety Commission (CPSC) regulations related to small parts. Moreover, it is not structured to cover toys, automotive textiles, or other industrial textiles. This list does not include restrictions related to use of substances in packaging or related materials.

The following legislation is not listed because there are no regulatory concentration limits but may warrant evaluation for applicability.

1. The U.S. Environmental Protection Agency (EPA), following the Montreal Protocols, promulgated legislation on ozone depleting compounds. Class I and Class II listed chemicals used in the process of manufacturing of product or packaging requires special labeling as detailed in the regulation. Residuals of the chemical components in the product or package are not necessary to trigger the requirement. Minor usage in textiles as a spot cleaner is acceptable.
2. California Proposition 65 requires a “clear and reasonable” warning label for all products sold in the state of California containing one or more chemicals known to the state to cause cancer or reproductive toxicity. Labeling requirements are dependent on consumer exposure to the chemical (measured in micrograms (µg)/day) not the concentration in the product. To comply with the law, manufacturers must either ensure that consumer exposure to regulated chemicals in their products do not exceed the established safe harbor levels or label their products. For more information on California Proposition 65, please visit our website at https://www.aafaglobal.org/AAFA/Solutions/Pages/RSL_Covering_California_Proposition_65.

C. Technical Notes

1. Chemical nomenclature can take several forms. Technical chemical names may take numerous forms. It is the responsibility of the user to verify synonyms of any regulated chemicals referenced.
2. It is possible that regulated components may be present in raw materials below the levels that require reporting on Material Safety Data Sheets (MSDS). Care should be taken to verify the presence of all regulated ingredients regardless of the concentration.
3. This list represents the known and applicable standards at the time of publication; any inaccuracy or omission is not the responsibility of AAFA.
4. Test methods noted in blue are the Global Apparel, Footwear and Textile Initiative (GAFTI) recommended test methods.

D. GAFTI Comments

1. The members of the Global Apparel, Footwear and Textile Initiative (GAFTI) have collaboratively produced recommended test methods for certain chemicals in cases where the test method is not stipulated by the regulation. This is an ongoing process, and test methods will continue to be added in subsequent releases of the RSL.

About GAFTI

Global Apparel, Footwear and Textile Initiative is an initiative to bring retailers, brands, mills, and factories together to improve efficiencies and set standards globally.

Because there is no single source of standards, there is a lack of standardization in the apparel, textile, and footwear industry. This gap creates conflicting requirements across customers.

GAFTI's goal is to reduce complexity and remove costs from common industry practices and prevent increased scrutiny from press and governments, which could lead to increased regulation.

For more information see: www.GAFTI.org

About AAFA

The American Apparel & Footwear Association (AAFA) is the national trade association representing apparel, footwear and other sewn products companies, and their suppliers, which compete in the global market. Representing more than 1,000 world famous name brands, retailers, and manufacturers — AAFA is the trusted public policy and political voice of the apparel and footwear industry, its management and shareholders, its nearly four million U.S. workers, and its contribution of \$384 billion in annual U.S. retail sales.

AAFA stands at the forefront as a leader of positive change for the apparel and footwear industry. With integrity and purpose, AAFA delivers a unified voice on key legislative and regulatory issues. AAFA enables a collaborative forum to promote best practices and innovation. AAFA's comprehensive work ensures the continued success and growth of the apparel and footwear industry, its suppliers, and its customers.

Acknowledgements

The AAFA gratefully acknowledges the support and contribution of the past and present members of the RSL Task Force in developing the RSL. The current members of the RSL Task Force are listed below.

RSL Task Force:

Andre Leroy, CTC Asia Ltd.
Meg Hughes, Bureau Veritas Consumer Products
Matt Nudell, Bureau Veritas Consumer Products
Brian Eichelberger, PhD, Consumer Testing Laboratories, Inc.
Kathy Leung, Ph.D Intertek
Pratik Ichhaporia, Ph.D, Intertek
Seemanta Mitra, Intertek
John Hwang, LF Sourcing
John R Gerringer, Modern Testing Services, LLC
Jongsei Park, Ph.D, Modern Testing Services, LLC
Anne Bonhoff, Ph.D, UL-STR
Lisa Clerici, Under Armour
Sean Cady, VF Corporation
Harsha Chenna, VF Corporation
Gamma Cheung, Ph.D., VF Corporation
Arthur Herold, Webster, Chamberlain & Bean
James Wilson, Webster, Chamberlain & Bean

AAFA also acknowledges the contributions of the following individuals who served as Peer Reviewers of this RSL.

Peer Review Group:

Nate Sponsler, AFIRM

Michael Walls, American Chemistry Council

Henry Boyter, Ph.D, Center for Environmentally Sustainable Textile and Apparel Businesses

John Easton, Ph.D, Dystar, Inc.

Amy Huang, Everlight Chemical Industrial Corporation

Antonio Barberi Ettaro, MODINT

Nick Odom, Springs Industries

Arylamines								
CAS Number	Chemical Name/Color Index Name	Restriction /Maximum Limit on Final Product or Tested Component	Country	Regulation	Test Method	Other Countries, U.S. States that also Regulate this Substance	Comment	GAFTI Comments
60-09-3	4-Amino azobenzene	Reported as not detected. China restriction limit: Textiles 20ppm Leather 30ppm EU restriction limit: Textiles and Leather: 30ppm Vietnam restriction limit: restricts AZO dyes and Formaldehyde Azo dyes limit: 30 ppm	Vietnam, EU, and China	Regulations below apply to all Arylamines listed in this RSL European Union REACH Regulation (EC) No. 1907/2006 Annex XVII The National Standard of the People's Republic of China GB18401-2010 The National Standard of the People's Republic of China GB20400-2006-Leather and Fur Vietnam Circular no.21/2017/TT-BCT Going into force May 1, 2018	Textiles (EU): ISO 14362-1 :2017 Leather (EU): EN ISO 17234-1:2015 Test methods specific for 4-Aminoazobenzene confirmation: LFGB 82.02-9 LFGB 82.02-15 EN ISO 17234-2:2011 AAB ISO 14362 - 3:2011 °GB/T 23344-2009 (pAAB) confirmation Textiles (China) GB/T 17592-2011 Leather and fur (China) GB/T 19942-2005	South Korea (KC Mark, for more information review Appendix II), and Indonesia Switzerland, Norway, and Taiwan, Turkey "Indonesia: No.72/M-IND/PER/7/2012 SNI7617:2013 Egypt: ES 7266-4/2011 ES 7322/2011" Taiwan: CNS 15290 CNS 15503 (children products) CNS 8634 (leather casual shoes) CNS 10632 (leather shoes)" Japan: Textile: JIS L 1940 Leather: ISO 17234-1:2010/-2:2011	4- Amino azobenzene is not listed in GB20400-2006; Only 23 arylamines are subject to this standard GB 30585-2014 (Safety technical specification for children's footwear) - will apply on 1 Jan 2016	
97-56-3	o-Aminoazotoluene							
92-67-1	4-Aminodiphenyl							
99-55-8	2-Amino-4-nitrotoluene							
90-04-0	o-Anisidine							
92-87-5	Benzidine							
106-47-8	p-Chloroaniline							
95-69-2	4-Chloro-o-toluidine							
120-71-8	p-Cresidine							
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							
101-14-4	4,4'-Methylene-bis-(2-chloroaniline)							
91-59-8	2-Naphthylamine							
101-80-4	4,4'-Oxydianiline							
139-65-1	4,4'-Thiodianiline							
95-80-7	2,4-Toluenediamine							
95-53-4	o-Toluidine							
137-17-7	2,4,5-Trimethylaniline							
95-68-1	2,4-Xylidine (China, Japan only)							
87-62-7	2,6-Xylidine (China, Japan only)							

Asbestos								
CAS Number	Chemical Name/Color Index Name	Restriction /Maximum Limit on Final Product or Tested Component	Country	Regulation	Test Method	Other Countries, U.S. States that also Regulate this Substance	Comments	GAFTI Comments
77536-66-4	Actinolite	Not detected	European Union	European Union REACH Regulation (EC) No. 1907/2006 Annex XVII	Microscopic examination; minimum magnification 1-250, attached; ratio of fiber length to diameter is at polarized light filter least 3:1-(industry practice - not specified by the regulation)	Switzerland and Norway, and the U.S		
12172-73-5	Amosite							
77536-67-5	Anthrophyllite							
12001-29-5	Chrysotile							
12001-28-4	Crocidolite							
77536-68-6	Tremolite							

Dioxins & Furans								
CAS Number	Chemical Name/Color Index Name	Restriction /Maximum Limit on Final Product or Tested Component	Country	Regulation	Test Method	Other Countries, U.S. States that also Regulate this Substance	Comments	GAFTI Comments
Group 1)			Germany	GERMANY: Dioxins & Furans can be found in § 3 Abs 2, Anlage 1 Eintrag 2 ChemikalienverbotsVO	US EPA 8290 (industry practice-not specified by the regulation)			
1746-01-6	2,3,7,8- Tetrachlorodibenzo-p-dioxin	Sum of Group 1: 1 µg/kg						
40321-76-4	1,2,3,7,8- Pentachlorodibenzo-p-dioxin							
51207-31-9	2,3,7,8-Tetrachlorodibenzofuran							
57117-31-4	2,3,4,7,8-Pentachlorodibenzofuran							
Group 2)								
39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	Sum of Group 1 & 2: 5 µg/kg						
19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin							
57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin							
57117-41-6	1,2,3,7,8- pentachlorodibenzofuran							
70648-26-9	1,2,3,4,7,8-Hexachlorodibenzofuran							
72918-21-9	1,2,3,7,8,9-Hexachlorodibenzofuran							
57117-44-9	1,2,3,6,7,8-Hexachlorodibenzofuran							
60851-34-5	2,3,4,6,7,8-Hexachlorodibenzofuran							
Group 3)								
35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	Sum of Groups 1, 2 & 3: 100 µg/kg						
3268-87-9	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin							
67562-39-4	1,2,3,4,6,7,8-Heptachlorodibenzofuran							
55673-89-7	1,2,3,4,7,8,9-Heptachlorodibenzofuran							
39001-02-0	1,2,3,4,6,7,8,9-Octachlorodibenzofuran							
Group 4)								
50585-41-6	2,3,7,8-Tetrabromodibenzo-p-dioxin	Sum of Group 4: 1 µg/kg						
109333-34-8	1,2,3,7,8-Pentabromodibenzo-p-dioxin							
67733-57-7	2,3,7,8-Tetrabromodibenzofuran							
131166-92-2	2,3,4,7,8-Pentabromodibenzofuran							
Group 5)								
110999-44-5	1,2,3,4,7,8-Hexabromodibenzo-p-dioxin	Sum of Groups 4 & 5: 5 µg/kg						
110999-46-7	1,2,3,7,8,9-Hexabromodibenzo-p-dioxin							
110999-45-6	1,2,3,6,7,8-Hexabromodibenzo-p-dioxin							
107555-93-1	1,2,3,7,8-Pentabromodibenzofuran							

Disperse Dyes								
CAS Number	Chemical Name/Color Index Name	Restriction /Maximum Limit on Final Product or Tested Component	Country	Regulation	Test Method	Other Countries, U.S. States that also Regulate this Substance	Comments	GAFTI Comments
2475-45-8	Disperse Blue 1	Not Detected (below detection limits - see test method)	Germany	German Food, Feed and Commodities Law §30 (LFGB §30)	§64 LFGB B82.02-10 DIN 54231 KS K 0736:2014	South Korea (applicable to babywear, children's wear and adult underwear)	The following disperse dyes are also restricted in Korea KC Mark: Disperse Blue 3 Disperse Blue 7 Disperse Blue 26, Disperse Blue 102 Disperse Orange 1 Disperse Yellow 1 Disperse Yellow 9 Disperse Yellow 39 Disperse Yellow 49 Disperse Red 11 Disperse Red 17	
12222-75-2	Disperse Blue 35							
12223-01-7	Disperse Blue 106							
61951-51-7	Disperse Blue 124							
730-40-5	Disperse Orange 3							
13301-61-6	Disperse Orange 37/59/76							
2872-52-8	Disperse Red 1							
2832-40-8	Disperse Yellow 3							
Carcinogenic Dyes*								
3761-53-3	Acid Red 26	Prohibited	Egypt	ES 7266-4/2011	DIN 54231 / §64 LFGB 82.02-10		* Carcinogenic is not used as a description of a sub category of dyes • The term appears in the Egyptian law restricting the use of carcinogenic dyes in clothing & textiles	
569-61-9	Basic Red 9							
632-99-5	Basic Violet 14							
2602-46-2	Direct Blue 6							
1937-37-7	Direct Black 38							
573-58-0	Direct Red 28							
2475-45-8	Disperse Blue 1							
82-28-0	Disperse Orange 11							
2832-40-8	Disperse Yellow 3							

Flame Retardants								
CAS Number	Chemical Name/Color Index Name	Restriction /Maximum Limit on Final Product or Tested Component	Country	Regulation	Test Method	Other Countries, U.S. States that also Regulate this Substance	Comment	GAFTI Comments
85535-84-8	Chlorinated paraffins (C10-C13)	0.1% by weight	European Union Switzerland	European Union POPs Regulation (EC) No. 850/2004, Annex I, amended by Regulation (EU) 2015/2030 SWITZERLAND: ORRChem annex 1.1 (Art.3)	Solvent extraction and GC-MS or LC-MS (industry practice - not specified by the regulation) ISO 18219: 2015	South Korea, and Canada	REACH: Also listed on the SVHC Candidate List POPs: Articles should not contain SCCPs above 0.15% by weight	
59536-65-1	Polybrominated biphenyls (PBBs)	Prohibited	European Union	European Union REACH Regulation (EC) No. 1907/2006 Annex XVII	Methanol extraction: analysis by GC-MS or LC-MS (industry practice - not specified by the regulation)	Turkey, Switzerland, Canada, US, South Korea, and Egypt	EU requirement applicable to textiles with direct skin contact South Korea requirement applicable only to bedclothes and nightclothes among underwear [applicable to textile products for babies, children and adult, and textile bedding]	
446255-22-7 207122-16-5, 68928-80-3	Heptabromodiphenyl ether (HeptaBDE)	10 ppm	Switzerland	POP regulation and in Switzerland: ORRChem textiles annex 1.1 (Art.3)	ISO 18219: 2015			
68631-49-2, 207122-15-4, 36483-60-0	Hexabromodiphenyl ether (HexaBDE)							
5436-43-1, 40088-47-9	Tetrabromodiphenyl ether (TetraBDE)							
25637-99-4, 3194-55-6, 134237-50-6, 134237-51-7 , 134237-52-8	Hexabromocyclododecane (HBCDD)							

Flame Retardants								
CAS Number	Chemical Name/Color Index Name	Restriction /Maximum Limit on Final Product or Tested Component	Country	Regulation	Test Method	Other Countries, U.S. States that also Regulate this Substance	Comment	GAFTI Comments
32534-81-9	Penta-bromodiphenyl ether (pentaBDE)	≤ 0.001% by weight	European Union	European Union POPs Regulation (EC) No. 850/2004, Annex I	Solvent extraction and analysis by GC-MS or LC-MS (industry practice - not specified by the regulation)	United States, Switzerland, and South Korea (KC Mark, for more information review Appendix II)	South Korea requirement applicable only to bedclothes and nightclothes among underwear [applicable to textile products for babies, children and adult, and textile bedding]	
32536-52-0	Octa-bromodiphenyl ether (octaBDE)	≤ 0.1% by weight	European Union	European Union REACH Regulation (EC) No. 1907/2006 Annex XVII				
126-72-7	Tris (2,3-dibromopropyl) phosphate (TRIS)	Prohibited	European Union	European Union REACH Regulation (EC) No. 1907/2006 Annex XVII	Methanol extraction and analysis by LC-MS or GC-MS (industry practice - not specified by the regulation)	Turkey, Switzerland, Japan, U.S., Egypt, and South Korea (KC Mark, for more information review Appendix II)	EU requirement applicable to textiles with direct contact with the skin. South Korea requirement applicable only to bedclothes and nightclothes among underwear [applicable to textile products for babies, children and adult, and textile bedding] US requirement applicable to sleepwear	
5412-25-9	Bis (2,3-dibromopropyl) phosphate	Prohibited	Japan	Japanese law for the control of household products containing harmful substances; Law no. 112, October 12, 1973. Partially amended in 1978 and 1981	Solvent extraction and analysis by GC-MS or LC-MS (industry practice - not specified by the regulation)			
545-55-1	Tris (1-aziridinyl)-phosphine oxide (TEPA)	Prohibited	European Union	European Union REACH Regulation (EC) No. 1907/2006 Annex XVII	KOH or NaOH digestion followed by GC-MS headspace analysis for ethyleneimine (industry practice - not specified by the regulation)	Switzerland, Turkey, Japan, South Korea, and Egypt	EU requirement applicable to textiles with direct contact with the skin	
1163-19-5	Decabromodiphenyl ether (DecaBDE)	0.1% by weight	Oregon (United States)	SB 596	Solvent extraction and analysis by GC-MS or LC-MS (industry practice - not specified by the regulation)	Also regulated in various States in the U.S	European Union REACH Regulation (EC) No. 1907/2006 Candidate List	
115-96-8	Tris(2-chloroethyl) phosphate (TCEP)	Prohibited	New York (United States)	A6195/	Solvent extraction and analysis by GC-MS or LC-MS (industry practice - not specified by the regulation)	Canada, EU	New York ban applies to consumer products, such as baby products, toys, car seats, nursing pillows, crib mattresses, and strollers for intended for use by a child under three years of age	
13674-87-8	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	0.1% by weight	Vermont, U.S.A	S81	Solvent extraction and analysis by GC-MS or LC-MS (industry practice - not specified by the regulation)		This chemical should not exceed 0.1% for children products(<12 yr) & residential upholstered furniture	

Fluorinated Greenhouse Gases								
CAS Number	Chemical Name/Color Index Name	Restriction /Maximum Limit on Final Product or Tested Component	Country	Regulation	Test Method	Other Countries, U.S. States that also Regulate this Substance	Comments	GAFTI Comments
2551-62-4	Sulfur hexafluoride - SF ₆	Prohibited	European Union	European Union Regulation (EU) No 517/2014	Headspace for components (industry practice - not specified by the regulation)		Regulation (EU) 517/2014	
	Hydrofluorocarbons (HFCs):							
75-46-7	HFC-23 - CHF ₃							
75-10-5	HFC-32 - CH ₂ F ₂							
593-53-3	HFC-41 - CH ₃ F							
138495-42-8	HFC-43-10mee - C ₅ H ₂ F ₁₀							
354-33-6	HFC-125 - C ₂ HF ₅							
359-35-3	HFC-134 - C ₂ H ₂ F ₄							
811-97-2	HFC-134a - CH ₂ FCF ₃							
75-37-6	HFC-152a - C ₂ H ₄ F ₂							
430-66-0	HFC-143 - C ₂ H ₃ F ₃							
420-46-2	HFC-143a - C ₂ H ₃ F ₃							
431-89-0	HFC-227ea - C ₃ HF ₇							
677-56-5	HFC-236cb - CH ₂ FCF ₂ CF ₃							
431-63-0	HFC-236ea - CHF ₂ CHFCF ₃							
690-39-1	HFC-236fa - C ₃ H ₂ F ₆							
679-86-7	HFC-245ca - C ₃ H ₃ F ₅							
460-73-1	HFC-245fa - CHF ₂ CH ₂ CF ₃							
406-58-6	HFC-365mfc - CF ₃ CH ₂ CF ₂ CH ₃							
	Perfluorocarbons (PFCs):							
75-73-0	Perfluoromethane - CF ₄							
76-16-4	Perfluoroethane - C ₂ F ₆							
76-19-7	Perfluoropropane - C ₃ F ₈							
355-25-9	Perfluorobutane - C ₄ F ₁₀							
678-26-2	Perfluoropentane - C ₅ F ₁₂							
355-42-0	Perfluorohexane - C ₆ F ₁₄							
115-25-3	Perfluorocyclobutane - C ₄ F ₈							

Metals								
CAS Number	Chemical Name/Color Index Name	Restriction /Maximum Limit on Final Product or Tested Component	Country	Regulation	Test Method	Other Countries, U.S. States that also Regulate this Substance	Comment	GAFTI Comments
Restrictions for Textiles								
7440-43-9	Cadmium (Cd)	Prohibited	Taiwan	CNS 15290	CNS 4797-2	EU, and Turkey	For all textile products and textile accessories. Test method CNS 4797-2 is similar to EN 71-3 for determination of soluble Cadmium content Washington State Children's Product Safety Act: total cadmium : 40 mg/kg	
7439-92-1	Lead (Pb)	Total Lead: 500 ppm Rate of lead release of Lead: ≤0.05 µg/cm ² /h (0.05 µg/g/h)	European Union	European Union REACH Regulation (EC) No. 1907/2006 Annex XVII	Total Lead: Total Digestion (industry practice - not specified by the regulation)		This restriction is applicable to products which are supplied to the general public, and can be placed in the mouth by children. This restriction will apply from 1 June 2016.	
7439-92-1	Lead (Pb)	100 ppm	Denmark	Statutory Order no. 856 of September 5, 2009	Total Digestion (industry practice - not specified by the regulation)	U.S., and Egypt	CPSC determined textiles are exempt from testing since they are unlikely to contain lead in excess of 100ppm Determination does not include post-production prints and surface coatings	
7439-92-1	Lead (Pb)	90 PPM	Korea	Korea Certification Mark (KC Mark, for more information review Appendix II)		Taiwan	Applies to textile products for children. (0 - 12 years)	Total Content: CPSC-CH-E1002-08.1 (http://www.gafti.org/template?series=4&article=11)
7439-92-1	Lead (Pb)	0.2 ppm (leachable)	China	FZ/T 81014-2008 - Infant's wear (woven)	GB/T 17593.1 Textiles-Determination of heavy metals Part 1: Atomic absorption spectrophotometry		Applies to woven infant wear and adornment products (≤ 24months) only	
7440-47-3	Chromium	1.0 ppm (leachable)		FZ/T 73025-2013 (Knitted garment and adornment for infant)		FZ/T 73025-2013 (Knitted garment and adornment for infant) Applies to infant knitted wear (≤ 36 months) or body height (≤ 100 cm)		
7439-97-6	Mercury	0.02 ppm (leachable)	China	FZ/T 81014-2008 - Infant's wear (woven)	GB/T 17593.4 Textiles--Arsenic and Mercury		Applies to woven infant wear and adornment products (≤ 24months) only	
7440-38-2	Arsenic	0.2 ppm (leachable)		FZ/T 73025-2013 (Knitted garment and adornment for infant)		FZ/T 73025-2013 (Knitted garment and adornment for infant) Applies to infant knitted wear (≤ 36 months) or body height (≤ 100 cm)		
7440-50-8	Copper	25 ppm (leachable)	China	FZ/T 81014-2008 - Infant's wear (woven) FZ/T 73025-2013 (Knitted garment and adornment for infant)	GB/T 17593.1 Textiles-Determination of heavy metals Part 1: Atomic absorption spectrophotometry		Applies to knitted textile products, including clothing, bedding and accessories for infants Infant is a child ≤ 36 months old or ≤ 100 cm in height.	

Metals								
CAS Number	Chemical Name/Color Index Name	Restriction /Maximum Limit on Final Product or Tested Component	Country	Regulation	Test Method	Other Countries, U.S. States that also Regulate this Substance	Comment	GAFTI Comments
Restrictions for Metals								
7440-43-9	Cadmium (Cd)	0.1 ppm (leachable)	Indonesia	Regulation, No. 07/M-IND/PER/2/2014	ISO 105-E04 followed by ICP-OES/AAS analysis		Infant apparel (0-36 months)	
7439-92-1	Lead (Pb)	0.2 ppm (leachable)						
7440-50-8	Copper	25 ppm (leachable)						
7440-02-0	Nickel (Ni)	1.0 ppm (leachable)	Indonesia	Regulation, No. 07/M-IND/PER/2/2014	ISO 105-E04 followed by ICP-OES/AAS analysis	Turkey	Infant apparel (0-36 months)	
7440-36-0	Antimony	30ppm (leachable)	China	FZ/T 73025-2013 (Knitted garment and adornment for infant)	GB/T 17593.4 Textiles- Determination of heavy metals Part 1: Atomic absorption spectrophotometry		Applies to knitted textile products, including clothing, bedding and accessories for infants Infant is a child ≤ 36 months old or ≤ 100 cm in height	
7440-43-9	Cadmium (Cd)	0.1 ppm (leachable)						
7440-48-4	Cobalt	1.0ppm (leachable)						
7440-02-0	Nickel (Ni)	1.0 ppm (leachable)						
18540-29-9	Chromium (Cr6+) hexavalent	Not Detected (0.5 ppm leachable)	China	FZ/T 73025-2013 (Knitted garment and adornment for infant)	GB/T 17593.4 Textiles- Determination of heavy metals Part 4: Determination of tear force of tongue-shaped test specimens			
7440-38-2	Arsenic (As)	100 mg/kg	China	GB 30585-2014 (Safety technical specification for children's footwear)	QB/T 4340 Footwear - Chemical test method - total heavy metal content - Inductively coupled plasma emission spectroscopy		Applies to children's footwear (≤14 years old) , Size of the shoes <250 mm (exclude children's rubber shoes)	
7439-92-1	Lead (Pb)							
7440-43-9	Cadmium (Cd)							
Restrictions for Leather								
7440-43-9	Cadmium (Cd)	Prohibited	Taiwan	CNS 15290	CNS 4797-2	EU, Egypt, and South Korea	For all textile products and textile accessories Washington State Children's Product Safety Act: total cadmium : 40 mg/kg	
7439-92-1	Lead (Pb)	Total Lead: 500 ppm Rate of lead release of Lead: ≤0.05 µg/cm ² /h (0.05 µg/g/h)	European Union	European Union REACH Regulation (EC) No. 1907/2006 Annex XVII	Total Lead: Total Digestion (industry practice - not specified by the regulation)		This restriction is applicable to products which are supplied to the general public, and can be placed in the mouth by children.	
7439-92-1	Lead (Pb)	100 ppm	Denmark	Statutory Order no. 856 of September 5, 2009	Total Digestion (industry practice - not specified by the regulation)	U.S.	U.S. federal lead substrate restrictions for each component in children's products (12 years and under) CPSC determined leather can be exempt from testing since it is unlikely to contain lead in excess of 100ppm Determination does not include finishes and surface coatings	
18540-29-9	Chromium (Cr 6+) - hexavalent	Not Detected (detection limit is 3 ppm)	Germany	Eighteenth Regulation on the Amendment of the German Ordinance on Commodities of 3rd August 2010	§ 64 LFGB 82.02 - 11(2008) ISO 17075	South Korea, Taiwan, and Egypt	European Union REACH Regulation (EC) No. 1907/2006 Annex XVII requirement: < 3 ppm	
7440-38-2	Arsenic	100 mg/kg	China	GB 30585-2014 (Safety technical specification for children's footwear)	QB/T 4340 Footwear - Chemical test method - total heavy metal content - Inductively coupled plasma emission spectroscopy		Applies to children's footwear (≤14 years old) , Size of the shoes <250 mm (exclude children's rubber shoes)	Extractable Content: EN71.3 Total Content: CPSC-CH-E1002-08.1 (http://www.gaffi.org/template?series=4&article=11)
7439-92-1	Lead (Pb)	100 mg/kg						
7440-43-9	Cadmium (Cd)	100 mg/kg						
18540-29-9	Chromium (Cr 6+) - hexavalent	10 mg/kg	China	GB 30585-2014 (Safety technical specification for children's footwear)	QB/T 22807 Leather and fur—Chemical tests—Determination of chromium VI content			

Metals								
CAS Number	Chemical Name/Color Index Name	Restriction /Maximum Limit on Final Product or Tested Component	Country	Regulation	Test Method	Other Countries, U.S. States that also Regulate this Substance	Comment	GAFTI Comments
Restrictions for Metal Parts								
7439-92-1	Lead (Pb)	Total Lead: 500 ppm Rate of lead release of Lead: ≤0.05 µg/cm ² /h (0.05 µg/g/h)	European Union	European Union REACH Regulation (EC) No. 1907/2006 Annex XVII	Total Lead: Total Digestion (industry practice - not specified by the regulation)		This restriction is applicable to products which are supplied to the general public, and can be placed in the mouth by children.	
7439-92-1	Lead (Pb)	100 ppm	Denmark	Statutory Order no. 856 of September 5, 2009	Total Digestion (industry practice - not specified by the regulation)	U.S., Egypt, and South Korea	U.S. federal lead substrate restrictions for each component in children's products (12 years and under) The CPSC requires specific test methods to be used for certification	
7440-02-0	Nickel (Ni) (in metal items)	0.5 µg/cm ² /week	European Union	European Union REACH Regulation (EC) No. 1907/2006 Annex XVII	Nickel release by EN 1811:2011+A1:2015 for non-coated item; EN 12472:2005+A1:2009 and EN 1811:2011+A1:2015 for coated item	Egypt	Restriction only applicable in cases where there is direct and prolonged contact with skin	
7440-43-9	Cadmium	100 ppm	European Union	European Union REACH Regulation (EC) No. 1907/2006 Annex XVII	Total Digestion (industry practice - not specified by the regulation)		This restriction is applicable to jewellery, imitation jewellery and hair accessories Washington State Children's Product Safety Act: total cadmium : 40 mg/kg	Extractable Content: EN71.3 Total Content: CPSC-CH-E1001-08.1 (http://www.gafti.org/template?series=4&article=11)
7440-38-2	Arsenic (As)	Prohibited	Taiwan	CNS 15290	CNS 4797-2	EU, Egypt, and South Korea	For all textile products and textile accessories	
7439-92-1	Lead (Pb)	100 mg/kg	China	GB 30585-2014 (Safety technical specification for children's footwear)	QB/T 4340 Footwear - Chemical test method - total heavy metal content - Inductively coupled plasma emission spectroscopy		Applies to children's footwear (≤14 years old) , Size of the shoes <250 mm (exclude children's rubber shoes)	
7440-43-9	Cadmium (Cd)							
Restrictions for Plastics and Plastic Film								
7439-92-1	Lead (Pb)	Total Lead: 500 ppm Rate of lead release of Lead: ≤0.05 µg/cm ² /h (0.05 µg/g/h)	European Union	European Union REACH Regulation (EC) No. 1907/2006 Annex XVII	Total Lead: Total Digestion (industry practice - not specified by the regulation)		This restriction is applicable to products which are supplied to the general public, and can be placed in the mouth by children.	
7439-92-1	Lead (Pb)	100ppm	Denmark	Statutory Order no. 856 of September 5, 2009	Total Digestion (industry practice - not specified by the regulation) Self_	U.S. South Korea (plastic trims for baby and children wear: 90 ppm), and Egypt	U.S. federal lead substrate restrictions for each component in children's products (12 years and under) After August 14, 2011 the level dropped to 100 ppm The CPSC requires specific test methods to be used for certification.	
7440-43-9	Cadmium (Cd)	100 ppm	European Union	European Union REACH Regulation (EC) No. 1907/2006 Annex XVII	Total Digestion (industry practice - not specified by the regulation)	Egypt, South Korea	It is applicable to particular plastic materials such as PVC, PU, etc	
7440-43-9	Cadmium (Cd)	Prohibited	Taiwan	CNS 15290	CNS 4797-2		For all textile products and textile accessories. Test method CNS 4797-2 is similar to EN 71-3 for determination of soluble Cadmium content	Extractable Content: EN71.3 Total Content: CPSC-CH-E1002-08.1
18540-29-9	Chromium (Cr6+) hexavalent	10ppm	Taiwan	CNS 15503	CNS 15331 Annex A CNS 15331 Annex B		For children's products	
7440-38-2	Arsenic (As)	100 mg/kg	China	GB 30585-2014 (Safety technical specification for children's footwear)	QB/T 4340 Footwear - Chemical test method - total heavy metal content - Inductively coupled plasma emission spectroscopy		Applies to children's footwear (≤14 years old) , Size of the shoes <250 mm (exclude children's rubber shoes)	
7439-92-1	Lead (Pb)							
7440-43-9	Cadmium (Cd)							

Metals								
CAS Number	Chemical Name/Color Index Name	Restriction /Maximum Limit on Final Product or Tested Component	Country	Regulation	Test Method	Other Countries, U.S. States that also Regulate this Substance	Comment	GAFTI Comments
Restrictions for Surface Coatings and Printing								
7439-92-1	Lead (Pb)	Total Lead: 500 ppm Rate of lead release of Lead: $\leq 0.05 \mu\text{g}/\text{cm}^2/\text{h}$ (0.05 $\mu\text{g}/\text{g}/\text{h}$)	European Union	European Union REACH Regulation (EC) No. 1907/2006 Annex XVII	Total Lead: Total Digestion (industry practice - not specified by the regulation)		This restriction is applicable to products which are supplied to the general public, and can be placed in the mouth by children.	
7439-92-1	Lead (Pb)	90 ppm	United States	16 C.F.R. §1303 – Ban of Lead-Containing Paint and Certain Consumer Products Bearing Lead-Containing Paint	CPSC-CH-E1003-09.1 ASTM F2853-10	Argentina, Canada, Taiwan, South Korea (baby and children wear: 90 ppm), Denmark (100 ppm applies to all products), and Egypt	U.S. federal lead in paint rules for children 12 and under set at 90 ppm for goods made on or after August 14, 2009 Argentina: Resolution 7/2009 established a restriction on lead content in paints, lacquers and varnishes Lead restriction set to 600 ppm and applies to paints, lacquers and varnishes defined as 'fluids, semi-fluids or solids with or without pigments which change to a solid film after their application in thin layers on metal, wood, stone, paper, leather, fabric, plastic or other materials'	Extractable Content: ASTM F963 Total Content: CPSC-CH-E1003-09.1 (http://www.gafti.org/template?series=4&article=11)
7440-43-9	Cadmium (Cd)	EU: 1000 ppm South Korea: 75 ppm	European Union	European Union REACH Regulation (EC) No. 1907/2006 Annex XVII	Total Digestion (industry practice-not specified by the regulation)	Egypt, South Korea	Total Cadmium is prohibited in Egypt.	
7440-43-10	Cadmium (Cd)	Prohibited	Taiwan	CNS 15290	CNS 4797-2	Egypt, South Korea, and the EU	Prohibited for all textile products and textile accessories. Test method CNS 4797-2 is similar to EN 71-3 for determination of soluble Cadmium content	
Soluble Heavy Metals								
	China: PVC artificial leather	Lead: 90 mg/kg Cadmium: 75 mg/kg	China	GB 21550-2008	GB 21550 Clause 5.4			
	Egypt: children less than 36 months footwear, size 26 and less Taiwan: Children products up to age 14	Antimony: 60 mg/kg Arsenic: 25 mg/kg Barium: 1000 mg/kg Cadmium: 75 mg/kg Chromium: 60 mg/kg Lead: 90 mg/kg Mercury: 60 mg/kg Selenium: 500 mg/kg	Egypt Taiwan	ES 7322/2011 CNS 15503 (children's product)	EN 71-3 CNS 4797-2			

Miscellaneous								
CAS Number	Chemical Name/Color Index Name	Restriction /Maximum Limit on Final Product or Tested Component	Country	Regulation	Test Method	Other Countries, U.S. States that also Regulate this Substance	Comments	GAFTI Comments
Formaldehyde								
50-00-0	Formaldehyde 0-36 months old	Not Detected (detection limit is 16 mg/kg) (textiles)	Japan	Japanese Law 112	Textile: ISO 14184-1 or JIS L1041 (Law 112) (textiles) China GB/T 2912.1 CNS 15580-1 Leather: ISO 17226-2	China, Russia, Finland, Norway, France, Netherlands, Austria, Lithuania, Germany, New Zealand, South Korea, Vietnam, Taiwan, Egypt, Indonesia and US Minnesota	Vietnam, South Korea define baby products as 0-36 months old Japan and Taiwan, define baby products as 0-24 months South Korea also regulates bed clothes with a limit of 300ppm Taiwan regulates indoor decorative textile with a limit of 300ppm	
	>36 months old (with direct skin contact)	75 ppm (detection limit is 16 mg/kg) (textiles)	Japan	Japanese Law 112	CNS 15579		China defines baby products based on particular standards in Textile Product (GB 18401) is 0-36 months. Leather Product (GB 20400 is 0-24 months) GB 30585 regulates Formaldehyde in children's shoes (≤14 years old) , Size of the shoes <250 mm (will apply from 1 Jan 2016)	
	>36 months old (no direct skin contact)	300 ppm (detection limit is 16 mg/kg) (textiles)	See other countries		Textile: ISO 14184-1 or JIS L1041 (Law 112) (textiles), China GB/T 2912.1, Leather: ISO 17226-2		US Minnesota Statutes, chapter 325F regulate formaldehyde in children's products (<8 years old) , <500 ppm	
	Formaldehyde (leather and fur) Baby products (0-24 months)	20 ppm	China	GB20400-2006	GB/T 19941			
	Leather and fur (with direct skin contact)	75 ppm	China	GB20400-2006	GB/T 19941			
	Leather and fur (without direct skin contact)	300 ppm	China	GB20400-2006	GB/T 19941			
	Formaldehyde (infant athletic shoes and skin contact components in children's athletic shoes)	≤ 75 ppm	China	QB/T 4331	Textile: GB/T 2912.1-2009 Leather: GB/T 19941-2005		Infant athletic shoes are defined as athletic shoes not greater than 170mm in size to be worn by a child under 3 years of age Children athletic shoes are defined as athletic shoes not greater than 250mm in size to be worn by a child between 3 and 14 years of age	
	Formaldehyde (non-skin contact components on children's athletic shoes)	≤ 300 ppm	China		Textile: GB/T 2912.1-2009 Leather: GB/T 19941-2005			
	Formaldehyde (Textiles and artificial leather on upper, lining and insole of vulcanized shoes- infant shoes)	≤ 75 ppm	China		GB/T 2912.1-2009			
Formaldehyde (Textiles and artificial leather on upper, lining and insole of vulcanized shoes- other shoes)	≤ 150 ppm	China		GB/T 2912.1-2009				

Miscellaneous								
CAS Number	Chemical Name/Color Index Name	Restriction /Maximum Limit on Final Product or Tested Component	Country	Regulation	Test Method	Other Countries, U.S. States that also Regulate this Substance	Comments	GAFTI Comments
2795-39-3	Perfluorooctane sulfonate (PFOS)	1 µg/m ² (textiles or other coated materials) <0.1% for articles	European Union	European Union POPs Regulation (EC) No. 850/2004 Annex I	Solvent Extraction LC-MS (industry practice-not specified by the regulation)	Canada and Norway, Egypt, Switzerland, and Turkey	The Canadian Environmental Protection Act, 1999 (CEPA 1999), Registration SOR 2008/178 prohibits the manufacture, use, sale, offer for sale and import of PFOS, as well as products containing PFOS	
335-67-1, 3825-26-1 335-95-5 2395-00-8 335-66-0 376-27-2 3108-24-5	Perfluorooctanoic acid (PFOA), its salts and esters	1 µg/m ² (textiles or other coated materials) 0.1% by weight (product) 0.001% by weight (substances or mixtures)	Norway	Norwegian Product Regulation	CEN/TS 15968:2010	European Union REACH Regulation (EC) No 1907/2006 Annex XVII entry 68 (will apply from 4 July 2020)	Effective June 1, 2014 PFOA is added to Norwegian Product Regulation with different limits in various materials. The substances whose CAS NO. are 335-67-1 and 3825-26-1 are listed under European Union REACH Regulation (EC) no. 1907/2006 Candidate List	
118685-33-9	Blue Colorant	Prohibited; 0.1% by weight for EU	European union	European Union REACH Regulation (EC) No 1907/2006 Annex XVII		Norway, Egypt, and Switzerland: ORRChem textiles annex 1.13 (Art.3)	Restriction of Blue Colorant in EU applies to substances and mixtures only. (Egypt applies to finished textile products)	
25154-52-3	Nonyl phenol	1000ppm	European Union	European Union REACH Regulation (EC) No 1907/2006 Annex XVII and European Union REACH Regulation (EC) no. 1907/2006 Candidate List		Taiwan CNS 15290 (for children's textile products below age 12 only), and Turkey	For substances and mixtures only. Also for textile and leather processing	
2795-39-3	Nonyl phenoethoxylates	100ppm		European Union REACH Regulation (EC) No 1907/2006 Annex XVII entry 46a (will apply from 3 Feb 2021) and European Union REACH Regulation (EC) no. 1907/2006 Candidate List	BS EN ISO 18254 Textiles- Methods for the Detection and Determination of alkyl phenol ethoxylates APEOS		REACH Annex XVII entry 46a is applicable to textile articles which can reasonably be expected to be washed in water	
	pH value	4.0 - 7.5 (0-36 months) 4.0 - 8.5 (direct skin contact) 4.0 - 9.0 (without direct skin contact)	China	GB 18401-2010	GB/T 7573			
		4.0 - 7.5 (infant, children, innerwear, midwear) 4.0-9.0 (outerwear, bedding)	South Korea	KC Mark	KS K ISO 3071 / ISO 3071			
		not less than 3.5	Egypt	ES 6535/2008	ISO 4045			
75-01-4	Vinyl Chloride Monomer (VCM)	1 mg/kg	Egypt	ES 7322/2011	ISO 6041 / §64 LFGB B80.32-1:1981-11 /	Germany- Bedarfsgegenstände Verordnung* German Consumer Goods Ordinance		
		5 mg/kg	China	GB 21550-2008	GB/T 4615-1984		for polyvinyl chloride artificial leather only	

Miscellaneous									
CAS Number	Chemical Name/Color Index Name	Restriction /Maximum Limit on Final Product or Tested Component	Country	Regulation	Test Method	Other Countries, U.S. States that also Regulate this Substance	Comments	GAFTI Comments	
N-Nitrosamines									
62-75-9	N-Nitrosodiethylamine	Not detected (detection limit: 0.5 mg/kg)	China	GB 25036-2010 GB 25038-2010 GB 30585-2014	GB/T 24153		only applicable for rubber component on vulcanized shoes *GB 30585-2014 (only applicable to rubber parts of infant shoes)		
55-18-5	N-Nitrosodibutylamine								
621-64-7	N-Nitrosopiperidine								
924-16-3	N-Nitrosopyrrolidine								
100-75-4	N-Nitrosomorpholine								
930-55-2	1-Nitrosopyrrolidine								
59-89-2	Nitrosomorpholine								
614-00-6	N-Nitroso-N-methylaniline								
612-64-6	N-Nitroso-N-ethylaniline								
Polycyclic aromatic hydrocarbons (PAH)									
91-20-3	Naphthalene (Taiwan only)	Taiwan: Benzo(a)pyrene: 1mg/kg Total of 16 PAH: 10mg/kg EU: Articles in direct skin contact with: 1 mg/kg (each) Childcare article: 0.5 mg/kg (each)	Taiwan and the European Union	CNS 3478 (Plastic shoes) CNS 15503 (children products) (up to age 14)	CNS 3478 Clause 6.18				
208-96-8	Acenaphthylene (Taiwan only)								
83-32-9	Acenaphthene (Taiwan only)								
86-73-7	Fluorene (Taiwan only)								
85-01-8	Phenanthrene (Taiwan only)								
120-12-7	Anthracene (Taiwan only)								
206-44-0	Fluoranthene (Taiwan only)								
129-00-0	Pyrene (Taiwan only)								
56-55-3	Benzo(a)anthracene (Taiwan and EU)		European Union	European Union REACH Regulation (EC) No 1907/2006 Annex XVII	AfPS GS 2014:01 PAH				
218-01-9	Chrysene (Taiwan and EU)								
193-39-5	Indeno(1,2,3-cd)pyrene (Taiwan only)								
205-99-2	Benzo(b)fluoranthene (Taiwan and EU)								
207-08-9	Benzo(k)fluoranthene (Taiwan and EU)								
50-32-8	Benzo(a)pyrene (Taiwan and EU)								
53-70-3	Dibenzo(a,h)anthracene (Taiwan and EU)								
191-24-2	Benzo(g,h,i)perylene (Taiwan only)								
192-97-2	Benzo(e)pyrene (EU only)								
205-82-3	Benzo(j)fluoranthene (EU only)								

Organotin Compounds								
CAS Number	Chemical Name/Color Index Name	Restriction /Maximum Limit on Final Product or Tested Component	Country	Regulation	Test Method	Other Countries, U.S. States that also Regulate this Substance	Comments	GAFTI Comments
56573-85-4	Tributyltin (TBT)	Prohibited	Canada	Prohibition of Certain Substances Regulation, 2012 (SOR/2012-285)	Taiwan test method: NIEA T504.30B DIN ISO/TS 16179: 2012-08	Japan, South Korea (KC Mark, for more information review Appendix II), Taiwan, and Turkey	South Korea also regulates TBT for baby clothing (less than 24 months), for bedclothes, and products that come into skin contact.	
668-34-8	Triphenyltin (TPhT)	0.1 percent by weight of tin	European Union	European Union REACH Regulation (EC) No. 1907/2006 Annex XVII	Recommended test method EN ISO 17353 (modified)/ EN ISO/TS 16179:2012 for footwear	Taiwan, Japan, and Turkey		
Various	All tri-substituted organotin compounds including TBT and TPhT)	0.1% by weight of tin	European Union	European Union REACH Regulation (EC) No. 1907/2006 Annex XVII	Recommended test method EN ISO 17353 (modified)/ EN ISO/TS 16179:2012 for footwear			
1002-53-5	Dibutyltin (DBT)	South Korean: 1 mg/kg EU: 0.1% by weight of tin	South Korea, and the EU	Self Regulatory Confirmation Notice (Notice No. 2007-34) issued by Korean Agency for Technology and Standards European Union REACH Regulation (EC) No. 1907/2006 Annex XVII	KS K 0737 DIN ISO/TS 16179: 2012-08	Turkey	South Korea: Applies to baby clothing only (less than 36 months).	
15231-44-4	Diocetyl tin (DOT)	0.1% by weight of tin	EU	European Union REACH Regulation (EC) No. 1907/2006 Annex XVII	KS K 0737 DIN ISO/TS 16179: 2012-08	Turkey	EU requirement applicable to some specific products, such as textiles with direct skin contact, childcare articles, etc.	

Pesticides								
CAS Number	Chemical Name/Color Index Name	Restriction /Maximum Limit on Final Product or Tested Component	Country	Regulation	Test Method	Other Countries, U.S. States that also Regulate this Substance	Comments	GAFTI Comments
93-72-1	2-(2,4,5-trichlorophenoxy) propionic acid, its salts and compounds	Not Detected	Switzerland, EU	European Union POPs Regulation (EC) No. 850/2004 Annex I Switzerland: ChemRRV (Chemikalien-Risikoreduktions-Verordnung) Art. 3 Appendix 1.1	U.S. EPA Method 8081A/ 8151A - (industry practice - not specified by the regulation)	Japan, South Korea	For Dieldrin, PCP, and TeCP, South Korea restrictions apply at different levels for underwear, baby clothing (<24 months) and bedclothes	
93-76-5	2,4,5-trichlorophenoxyacetic acid, its salts and compounds							
309-00-2	Aldrin (Switzerland and EU POPs)							
57-74-9	Chlordane (Switzerland and EU POPs)							
72-54-8	Dichloro-diphenyl-dichloro ethane (DDD)							
72-55-9	Dichloro-diphenyl-dichloro ethylene (DDE)							
50-29-3	Dichloro-diphenyl-trichloro ethane (DDT) (both Switzerland)							
60-57-1	Dieldrin							
72-20-8	Endrine							
76-44-8	Heptachlorine (Switzerland and EU POPs)							
1024-57-3	Epoxy-heptachlorine							
115-29-7 959-98-8 33213-65-9	Endosulfan and its isomers	Prohibited	EU	European Union POPs Regulation (EC) No. 850/2004 Annex I				
36355-01-8	Hexabromobiphenyl							
608-93-5	Pentachlorobenzene	10 ppm	Switzerland	Switzerland: ORRChem textiles annex 1.1 (Art.3)	ISO 18219: 2015			
608-90-2	Pentabromobenzene	Prohibited	EU	European Union POPs Regulation (EC) No. 850/2004 Annex I				
63405-99-2	4,6-Dichloro-7 (2,4,5-trichlorophenoxy) 0-2-trifluoro methyl benz-imidazole (DTTB)	≤ 30 ppm	Japan	Japan Law for the Control of Household Products			Textile Products Only	

Pesticides								
CAS Number	Chemical Name/Color Index Name	Restriction /Maximum Limit on Final Product or Tested Component	Country	Regulation	Test Method	Other Countries, U.S. States that also Regulate this Substance	Comments	GAFTI Comments
118-74-1	Hexachlorobenzene (Switzerland and EU POPs)	Prohibited	Canada, Switzerland, and the EU	Canada: Prohibition of Certain Toxic Substances Regulations 2012 (SOR/2012-285) Switzerland: ChemRRV (Chemikalien-Risikoreduktions-Verordnung) Art. 3 Appendix 1.1 European Union POPs Regulation (EC) No. 850/2004 Annex I				
608-73-1	Hexachlorocyclohexane (HCH, all isomers) except gamma-hexachlorocyclohexane (except lindane [58-89-9] in medical products) (Switzerland and EU POPs)							
465-73-6	Isodrin							
4234-79-1	Kelevane							
143-50-0	Kepone (Chlordecone) (Switzerland and EU POPs)							
72-43-5	Methoxychlor	Prohibited	Canada, Switzerland, and the EU	Canada: Prohibition of Certain Toxic Substances Regulations 2012 (SOR/2012-285) Switzerland: ChemRRV (Chemikalien-Risikoreduktions-Verordnung) Art. 3 Appendix 1.1 European Union POPs Regulation (EC) No. 850/2004 Annex I				
2385-85-5	Mirex (Switzerland and EU POPs)							
72-56-0	Perthane							
82-68-8	Quintozene							
8001-50-1	Strobane							
297-78-9	Telodrin							
8001-35-2	Toxaphene (Switzerland and EU POPs)							
1336-36-3 53469-21-9 and Various	Halogenated biphenyls, including Polychlorinated biphenyl (PCB) (both Switzerland)							
Various	Halogenated terphenols, including Polychlorinated terphenyl (PCT)							
Various	Halogenated naphthalenes							
Various	Halogenated diarylalkanes							
Various	Halogenated diphenyl methanes							
99688-47-8	Monomethyl-dibromo-diphenyl methane							
81161-70-8	Monomethyl-dichloro-diphenyl methane							
76253-60-6	Monomethyl-tetrachloro-diphenyl methane							
87-86-5	Pentachlorophenol (PCP), its salts and compounds	Not used (textiles and leather) ≤ 5mg/kg (wood based materials)	Switzerland	Switzerland: ChemRRV (Chemikalien-Risikoreduktions-Verordnung) Art. 3 Appendix 1.1 and Appendice 2.17		Spain, Egypt, Denmark, Germany, the Netherlands, Austria, Norway, and South Korea, banned in GB 25036 and GB 25038		
25167-83-3 935-95-5	Tetrachlorophenol (TeCP), its salts and compounds 2,3,5,6-TeCP	Not detected (0.5 mg/kg)	China	GB 25036/ GB 25038	GB/T 18414.1.1 or GB/T 18414.2	Switzerland	2,3,5,6-TeCP is banned in China GB 25036 and GB 25038 for textile and synthetic leather materials. limit: Not detected (0.5 mg/kg)	
624-49-7	Dimethyl Fumarate	Prohibited	EU	European Union REACH regulation (EC) No. 1907/2006 Annex XVII, limit 0.1 mg/kg	CNS 15331 Annex C	South Korea (KC Mark, for more information review Appendix II), Norway, and Taiwan	0.1 mg/kg - China (GB 30585-2014) will apply on 1 Jan 2016)	

Phthalates								
CAS Number	Chemical Name/Color Index Name	Restriction /Maximum Limit on Final Product or Tested Component	Country	Regulation	Test Method	Other Countries, U.S. States that also Regulate this Substance	Comments	GAFTI Comments
	Phthalates (Except those listed below, DEHP, DNOP, BBP, DBP, DINP, DIDP)	0.05% by weight	Denmark	Denmark Statutory Order 855 of 05/09/2009			Applies to childcare articles for children 0-3 years old.	
117-81-7	Di (2-ethylhexyl) phthalate (DEHP)	U.S. and Canada each phthalates 0.1% by weight For E.U DEHP+DBP+BBP 0.1% by weight DINP+DIDP+DNOP: 0.1% by weight	South Korea, U.S., Denmark, and the EU	Self Regulatory Confirmation Notice (Notice No. 2007-34) issued by Korean Agency for Technology and Standards. U.S. Consumer Product Safety Improvement Act (PL 110-787). Schedule 1 of the Canadian Hazardous Products Act (Phthalates regulation SOR/2010-298) European Union REACH Regulation (EC) no. 1907/2006 Candidate List for DEHP, BBP, DBP	CPSC-CH-C1001-09.3 or GB/T 22048-2008	European Union (European Union REACH Regulation No. 1907/2006 Annex XVII), California (AB1108), Denmark (Statutory Order 786), South Korea (KC Mark, for more information review Appendix II), Egypt, Turkey, and Denmark DEHP, BBP, DBP are listed on the EU REACH Candidate List	In South Korea, applies to baby clothing (less than 24 months)	
85-68-7	Benzyl Butyl phthalate (BBP)						In the U.S., DEHP, DBP and BBP are restricted in child care articles (3 years and under) that facilitate sleep or feeding Unclear which footwear and apparel articles are covered In the EU, DEHP, DBP and BBP are restricted for child care articles intended to facilitate sleep, relaxation, hygiene, the feeding of children or sucking on the part of children	
84-74-2	Di-n-butyl phthalate (DBP)						Examples: Child bibs, infant sleeping bag DEHP, BBP, and DBP are listed under REACH Annex XIV with sunset dates in February 2015	
117-84-0	Di-n-octyl phthalate (DNOP)						Washington – Children’s Safe Products Act Part 1 (RCW 70.240.020) restricts the six phthalates. The sum of DEHP, BBP, DBP, DINP, DIDP, and DnOP must not exceed 1000 ppm	
68515-48-0 28553-12-0	Di-isononyl phthalate (DINP)						In the US, DINP, and in the EU DINP, DnOP, and DIDP are restricted in toys and child care articles that can be placed in the mouth China - GB 30585-2014 regulate Infant’s footwear (0-36 months, footwear ≤170mm): DEHP, DBP, BBP, DINP, DIDP, DNOP: 0.1% by weight	
68515-49-1 26761-40-0	Di-isodecyl phthalate (DIDP)						Children’s footwear (36 months – 14 years, footwear: >170mm, but ≤ 250mm): DEHP, DBP, BBP: 0.1% By weight US CPSC prohibits DEHP, DBP, BBP, DINP, DIBP, DPENP, DHEXP, DCHP in children’s toys and child care articles (16 CFR 1307)	
							Restricted in the EU (REACH Annex XVII) for childcare articles which can be placed in the mouth by children intended to facilitate sleep, relaxation, hygiene, the feeding of children or sucking on the part of children	

Phthalates								
CAS Number	Chemical Name/Color Index Name	Restriction /Maximum Limit on Final Product or Tested Component	Country	Regulation	Test Method	Other Countries, U.S. States that also Regulate this Substance	Comments	GAFTI Comments
131-11-3	Dimethyl phthalate (DMP)	0.1% (sum) by weight	Taiwan	CNS 15503 (children's products)	CNS 15138			
84-66-2	Diethyl phthalate (DEP)							
84-69-5	Diisobutyl phthalate (DIBP)	0.1% w/w per article (each)	European Union	European Union REACH Regulation (EC) no. 1907/2006 Candidate List	CPSC-CH-C1001-09.3 or GB/T 22048-2008 or ISO14389: 2014			
68515-42-4	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP)							
71888-89-6	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP)							
117-82-8	Bis(2-methoxyethyl) phthalate (DMEP)							
605-50-5	Diisopentylphthalate (DIPP)							
776297-69-9	N-pentyl-isopentyl phthalate (NPIPP)							
84777-06-0	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear (DPP)							
84-75-3	Di-n-hexyl phthalate (DnHP/DHP)							
131-18-0	Dipentyl phthalate							
68515-50-4	1,2- Benzenedicarboxylic acid. Dihexyl ester. Branched and linear							
68515-51-5 68648-93-1	1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters; 1,2-benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with ≥ 0.3% of dihexyl phthalate (EC No. 201-559-5)							

Solvents								
CAS Number	Chemical Name/Color Index Name	Restriction /Maximum Limit on Final Product or Tested Component	Country	Regulation	Test Method	Other Countries, U.S. States that also Regulate this Substance	Comments	GAFTI Comments
87-68-3	Hexachlorobutadiene	100 ppm	EU, Switzerland, and Canada	EU: POP regulation 850/2004 ANNEX I Switzerland: ORRchem annex 1.1 (art.3) Canada Prohibition of Certain Toxic Substances Regulations 2012 (SOR/2012-285)				
56-23-5	Carbon Tetrachloride	0.1% (mass)- Each	Switzerland, EU, and Japan	Germany - Chemikalienverbot Verordnung (Prohibition of Chemicals Ordinance), section 16 Japan Law for the Control of Household Products Containing Harmful Substances	Headspace for components (industry practice - not specified by the regulation)	European Union REACH Regulation (EC) No. 1907/2006 Annex XVII (Restriction applies to substances and mixtures) only for Pentachloroethane, 1,1,1,2-Tetrachloroethane, 1,1,2,2-Tetrachloroethane, Chloroform, 1,1,2-Trichloroethane, 1,1-Dichloroethylene, and Trichloroethylene Regulation (EC) No. 1005/2009 Denmark		
71-55-6	1,1,1-Trichloroethane							
76-01-7	Pentachloroethane	0.1% (mass)- Each	EU and Japan	Germany - Chemikalienverbot Verordnung (Prohibition of Chemicals Ordinance), section 16 Japan Law for the Control of Household Products Containing Harmful Substances	Headspace for components (industry practice - not specified by the regulation)	European Union REACH Regulation (EC) No. 1907/2006 Annex XVII (Restriction applies to substances and mixtures) only for Pentachloroethane, 1,1,1,2-Tetrachloroethane, 1,1,2,2-Tetrachloroethane, Chloroform, 1,1,2-Trichloroethane, 1,1-Dichloroethylene, and Trichloroethylene Regulation (EC) No. 1005/2009 Denmark		
630-20-6	1,1,1,2-Tetrachloroethane							
79-34-5	1,1,2,2-Tetrachloroethane							
67-66-3	Chloroform							
79-00-5	1,1,2-Trichloroethane							
75-35-4	1,1-Dichloroethylene							
79-01-6	Trichloroethylene							
127-18-4	Tetrachloroethylene (Japan only)							
	Volatile organics	≤20 g/m ²	China	GB 21550-2008 (PVC artificial leather)	GB 21550 Clause 5.5		For GB 21550, it is not banned for chlorinated solvents, but all Volatile Organic, by measuring the weight difference of a PVC leather in an oven at 100°C for 6 hours This regulation applies to all textiles and footwear products containing PVC artificial leather	

Glossary of Terms/Acronyms related to the AAFA RSL list

BS—British Standard

CAS—Chemical Abstracts Service. CAS Registry Numbers (often referred to as CAS RNs or CAS Numbers) are unique identifiers for chemical substances. CAS is a division of the American Chemical Society. See www.cas.org.

CEN—European Committee for Standardization

CPSC - Consumer Product Safety Commission. Main U.S. government agency responsible for product safety and for enforcement of CPSIA.

CPSIA - Consumer Product Safety Improvement Act

Detection limit—the lowest quantity of a substance that can be distinguished from the absence of that substance (a blank value) within a stated confidence limit

DIN—German Standards Institute (Deutsches Institut für Normung)

Dioxins and Furans—Chemical compounds that are an undesirable by-product in the manufacture of herbicides, disinfectants, and other agents

EEC—European Economic Community

EN—European Standard

EPA—Environmental Protection Agency (U.S.)

EU—European Union

GB—Guo Biao in Chinese which means National Standards

GC-MS—Gas Chromatography/Mass Spectrometer - instrument used to identify components of mixtures or unknown substances - liquids, gases.

ISO—International Organization for Standardization

JIS—Japanese Industrial Standard

KOH—Potassium Hydroxide

LFGB—Lebensmittel-, Bedarfsgegenstände- und Futtermittelgesetzbuch – German Law Book on food, consumer article and feed.

LC-MS—Liquid Chromatography/Mass Spectrometer - instrument used to identify components of mixtures or unknown substances - liquids, gases.

mg/L—milligram per liter.

mg/kg—milligram per kilogram.

MSDS Information—Material Safety Data Sheet Information – this is chemical safety & toxicological information supplied with chemicals

NaOH—Sodium Hydroxide

Percent by Mass—also called weight percent or percent by weight, this is the mass of the solute divided by the total mass of the solution and multiplied by 100% (also see ppm)

Pesticide—A chemical agent or substance used for destroying pests

ppm—Parts Per Million. A unit describing concentrations of chemical substances. 1 ppm can also be notated as 1 milligram per kilogram (mg/kg) or 1 microgram per gram ($\mu\text{g/g}$).

ppb—Parts per Billion. A unit describing concentrations of chemical substances. 1 ppb can also be notated as 1 microgram per kilogram ($\mu\text{g/kg}$).

REACH - Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals. It entered into force on 1st June 2007. It streamlines and improves the former legislative framework on chemicals of the European Union (EU).

Solvent—A substance in which another substance is dissolved, forming a solution.

Test method – A definitive procedure that produces a test result.

UK—United Kingdom

Appendix I							
Reporting: Appendix I lists regulations which have a reporting requirement that are not necessarily otherwise listed in the RSL.							
CAS Number	Chemical Name/Color Index Name	Restriction / Maximum Limit Triggering Reporting in Article	Country	Regulation	Test Method [detection limit] if any	Other Countries/States Which Also Regulate	GAF TI Comments
121-14-2*	2,4-Dinitrotoluene	over 0.1%	EU	REACH SVHC (Substances of Very High Concern)		Washington (E.U)	
101-77-9*	4,4'- Diaminodiphenylmethane (MDA)						
81-15-2*	5-tert-butyl-2,4,6-trinitro-m-xylene						
79-06-1	Acrylamide						
85535-84-8	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)						
NA	Aluminosilicate Refractory Ceramic Fibres Aluminosilicate Refractory Ceramic Fibres are fibres covered by index number 650-017-00-8 in Annex VI, part 3, table 3.1 of Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, and fulfil the three following conditions: a) oxides of aluminium and silicon are the main components present (in the fibres) within variable concentration ranges b) fibres have a length weighted geometric mean diameter less two standard geometric errors of 6 or less micrometres (µm) c) alkaline oxide and alkali earth oxide (Na ₂ O+K ₂ O+CaO+MgO+BaO) content less or equal to 18% by weight						
7789-09-5*	Ammonium dichromate						
120-12-7	Anthracene						
90640-80-5	Anthracene oil						
90640-81-6	Anthracene oil, anthracene paste						
91995-15-2	Anthracene oil, anthracene paste, anthracene fraction	over 0.1%	EU	REACH SVHC (Substances of Very High Concern)			
91995-17-4	Anthracene oil, anthracene paste, distn. Lights						
90640-82-7	Anthracene oil, anthracene-low						

85-68-7*	Benzyl butyl phthalate (BBP)	over 0.1%	EU	REACH SVHC (Substances of Very		Washington (U.S.)	
117-81-7*	Bis (2-ethylhexyl)phthalate (DEHP)						
56-35-9	Bis(tributyltin)oxide (TBTO)	over 0.1%	EU	REACH SVHC (Substances of Very High Concern)			
10043-35-3 / 11113-50-1	Boric acid						
7646-79-9	Cobalt dichloride						
1303-28-2*	Diarsenic pentaoxide						
1327-53-3*	Diarsenic trioxide						
84-74-2*	Dibutyl phthalate (DBP)	over 0.1%	EU	REACH SVHC (Substances of Very High Concern)		Washington (US)	
84-69-5*	Diisobutyl phthalate	over 0.1%	EU	REACH SVHC (Substances of Very High Concern)			
1303-96-4/ 1330-43-4/ 12179-04-3	Disodium tetraborate, anhydrous						
25637-99-4*/3194-55-6* (134237-50-6)* (134237-51-7)* (134237-52-8)*	Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified						
	Alpha-hexabromocyclododecane						
	Beta-hexabromocyclododecane						
	Gamma-hexabromocyclododecane						
7758-97-6*	Lead chromate						
12656-85-8*	Lead chromate molybdate sulphate red (C.I. Pigment Red 104)						
7784-40-9	Lead hydrogen arsenate						
1344-37-2*	Lead sulfochromate yellow (C.I. Pigment Yellow 34)						
65996-93-2	Pitch, coal tar, high temp.						
7789-00-6*	Potassium chromate						
7778-50-9*	Potassium dichromate						
7775-11-3*	Sodium chromate						
7789-12-0/ 10588-01-9*	Sodium dichromate						
12267-73-1	Tetraboron disodium heptaoxide, hydrate						
79-01-6*	Trichloroethylene						
15606-95-8	Triethyl arsenate						

7738-94-5* 13530-68-2*	Acids generated from chromium trioxide and their oligomers. Names of the acids and their oligomers: Chromic acid, Dichromic acid, Oligomers of chromic acid and dichromic acid.					
1333-82-0*	Chromium trioxide					
513-79-1	Cobalt(II) carbonate					
71-48-7	Cobalt(II) diacetate					
10141-05-6	Cobalt(II) dinitrate					
10124-43-3	Cobalt(II) sulphate					
71888-89-6	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich					
96-18-4	1,2,3-Trichloropropane					
872-50-4	1-Methyl-2-pyrrolidone					
302-01-2 / 7803-57-8	Hydrazine					
68515-42-4	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters					
7789-06-2	Strontium chromate	over 0.1%	EU	REACH SVHC (Substances of Very High Concern)		
111-15-9	2-Ethoxyethyl acetate					
1163-19-5	Bis(pentabromophenyl) ether (deca-BDE)					
72629-94-8	Pentacosaflluorotridecanoic acid					
2058-94-8	Henicosaflluoroundecanoic acid					
307-55-1	Tricosaflluorododecanoic acid					
376-06-7	Heptacosaflluorotetradecanoic acid					
NA	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated – covering well defined substances and UVCB substances, polymers and homologues					
NA	4-nonylphenol, branched and linear – substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bonded in position 4 to phenol, covering also UVCB and well-defined substances which include any of the individual isomers or a combination thereof					

123-77-3	Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	over 0.1%	EU	REACH SVHC (Substances of Very High Concern)		
85-42-7, 13149-00-3, 14166-21-3	Cyclohexane-1,2-dicarboxylic anhydride [1], cis-cyclohexane-1,2-dicarboxylic anhydride [2], trans-cyclohexane-1,2-dicarboxylic anhydride [3] [The individual cis- [2] and trans- [3] isomer substances and all possible combinations of the cis- and trans-isomers [1] are covered by this entry]					
25550-51-019438-60-9, 48122-14-1, 57110-29-9	Hexahydromethylphthalic anhydride [1], Hexahydro-4-methylphthalic anhydride [2], Hexahydro-1-methylphthalic anhydride [3], Hexahydro-3-methylphthalic anhydride [4][The individual isomers [2], [3] and [4] (including their cis- and trans- stereo isomeric forms) and all possible combinations of the isomers [1] are covered by this entry]					
625-45-6	Methoxy acetic acid					
84777-06-0	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear					
605-50-5	Diisopentylphthalate (DIPP)					
776297-69-9	N-pentyl-isopentylphthalate					
629-14-1	1,2-Diethoxyethane					
68-12-2	N,N-dimethylformamide; dimethyl formamide					
683-18-1	Dibutyltin dichloride (DBTC)					
51404-69-4	Acetic acid, lead salt, basic					
1319-46-6	Trilead bis(carbonate) dihydroxide					
12036-76-9	Lead oxide sulfate					
69011-06-9	[Phthalato(2-)dioxotrilead					
12578-12-0	Dioxobis(stearato)trilead					
91031-62-8	Fatty acids, C16-18, lead salts					

13814-96-5	Lead bis(tetrafluoroborate)	over 0.1%	EU	REACH SVHC (Substances of Very High Concern)		
20837-86-9	Lead cyanamide					
10099-74-8	Lead dinitrate					
1317-36-8	Lead monoxide (lead oxide)					
1314-41-6	Orange lead (lead tetroxide)					
12060-00-3	Lead titanium trioxide					
12626-81-2	Lead titanium zirconium oxide					
12065-90-6	Pentalead tetraoxide sulphate					
8012-00-8	Pyrochlore, antimony lead yellow					
68784-75-8	Silicic acid (H ₂ Si ₂ O ₅), barium salt (1:1), lead-doped [with lead (Pb) content above the applicable generic concentration limit for 'toxicity for reproduction' Repr. 1A (CLP) or category 1 (DSD); the substance is a member of the group entry of lead compounds, with index number 082-001-00-6 in Regulation (EC) No 1272/2008]					
11120-22-2	Silicic acid, lead salt					
62229-08-7	Sulfurous acid, lead salt, dibasic					
78-00-2	Tetraethyllead					
12202-17-4	Tetralead trioxide sulphate					
12141-20-7	Trilead dioxide phosphonate					
110-00-9	Furan					
75-56-9	Methyloxirane (Propylene oxide)					
64-67-5	Diethyl sulphate					
77-78-1	Dimethyl sulphate					
143860-04-2	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine					
88-85-7	Dinoseb (6-sec-butyl-2,4-dinitrophenol)					
838-88-0	4,4'-methylenedi-o-toluidine					
101-80-4	4,4'-oxydianiline and its salts					
60-09-3	4-Aminoazobenzene;					

95-80-7	4-methyl-m-phenylenediamine (2,4-toluene-diamine)	over 0.1%	EU	REACH SVHC (Substances of Very High Concern)		
120-71-8	6-methoxy-m-toluidine (p-cresidine)					
92-67-1	Biphenyl-4-ylamine					
97-56-3	o-aminoazotoluene					
95-53-4	o-Toluidine;					
79-16-3	N-methylacetamide					
106-94-5	1-bromopropane; n-propyl bromide					
7778-44-1	Calcium Arsenate					
111-96-6	Bis(2-methoxyethyl) ether					
11103-86-9	Potassium hydroxyoctaoxidizincate dichromate					
6477-64-1	Lead dipicrate					
127-19-5	N,N Dimethylacetamide (DMAC)					
7778-39-4	Arsenic acid					
90-04-0	2-methoxyaniline; o-anisidine					
3687-31-8	Trilead diarsenate					
107-06-2	1,2 Dichloroethane					
49663-84-5	Pentazinc chromate octahydroxide					
25214-70-4	Formaldehyde, oligomeric reaction products with aniline (technical MDA)					
117-82-8	Bis(2mthoxyethyl) phthalate					
140-66-9	4-(1,1,3,3, tetramethylbutyl)phenol					
13424-46-9	Lead azide, Lead diazide					
77-09-8	Phenolphthalein					
24613-89-6	Dichromium tris(chromate)					
15245-44-0	Lead Styphnate					
101-14-4	2,2-dichloro-4,4,methylenedianiline					
112-49-2	1,2-bis(2methoxy-ethoxy) ethane (TEGDME; triglyme)					
110-71-4	1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)					
561-41-1	4,4'-bis(dimethylamino)-4'- (methylamino)trityl alcohol [with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]					
50-32-8	Benzo[def]chrysene (Benzo[a]pyrene)					

90-94-8	4,4'-bis(dimethylamino) benzophenone (Michler's ketone)	over 0.1%	EU	REACH SVHC (Substances of Very High Concern)		
2580-56-5	[4-[[4-anilino-1-naphthyl][4-(dimethylamino)phenyl]methylene]cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Blue 26) [with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]					
101-61-1	N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)					
6786-83-0	α,α-Bis[4-(dimethylamino)phenyl]-4-(phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4) [with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]					
1303-86-2	Diboron trioxide					
75-12-7	Formamide					
17570-76-2	Lead(II) bis(methanesulfonate)					
2451-62-9	TGIC (1,3,5, tris(oxiranyl methyl)-1,3 triazine-2,4,6 (1H,3H,5H)trione)					
59653-74-6	b-TGIC (1.3.5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6(1H3H,5H)trione)					
548-62-9	[4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Violet 3) [with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]					
7440-43-9	Cadmium					
3825-26-1	Ammonium pentadecafluorooctanoate (APFO)					
335-67-1	Pentadecafluorooctanoic acid					
131-18-0	Dipentyl phthalate (DPP)					

NA	4-Nonylphenol, branched and linear, ethoxylated [substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, ethoxylated covering UVCB- and well-defined substances, polymers and homologues, which include any of the individual isomers and/or combinations thereof]					
1306-19-0	Cadmium oxide					
1306--23-6	Cadmium sulphide					
573-58-0	Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate)(C.I. Direct Red 28)					
1937-37-7	Disodium 4-amino-3-[[4'-[(2,4-diaminophenyl)azo][1,1'-biphenyl]-4-yl]azo]-5-hydroxy-6-(phenylazo)naphthalene-2,7-disulphonate (C.I. Direct Black 38)	over 0.1%	EU	REACH SVHC (Substances of Very High Concern)		
84-75-3	Dihexyl phthalate					
96-45-7	Imidazolidine-2-thione (2-imidazoline-2-thiol)					
301-04-2	Lead di(acetate)					
25155-23-1	Trixylyl phosphate					
68515-50-4	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear					
10108-64-2	Cadmium chloride					
NA	Sodium perborate; perboric acid, sodium salt					
7632-04-4	Sodium peroxometaborate					
15571-58-1	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)					

-	Reaction mass of 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate and 2-ethylhexyl 10-ethyl-4-[[2-[(2-ethylhexyl)oxy]-2-oxoethyl]thio]-4-octyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (reaction mass of DOTE and MOTE)					
7790-79-6	Cadmium fluoride					
10124-36-4, 31119-53-6	Cadmium sulphate					
3846-71-7	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)					
25973-55-1	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)					
68515-51-5, 68648-93-1	1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters; 1,2-benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with ≥ 0.3% of dihexyl phthalate (EC					
-	5-sec-butyl-2-(2,4-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [1], 5-sec-butyl-2-(4,6-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [2] [covering any of the individual isomers of [1] and [2] or any combination thereof]	over 0.1%	EU	REACH SVHC (Substances of Very High Concern)		
1120-71-4	1,3-propanesultone					
3864-99-1	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)					
36437-37-3	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)					
98-95-3	Nitrobenzene					
375-95-1; 21049-39-8; 4149-60-4	Perfluorononan-1-oic acid (2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9-heptafluorononanoic acid and its sodium and ammonium salts					

50-00-0	Formaldehyde	5 ppm	United States	Washington Children's Safe Product Act		
62-53-3	Aniline	1 ppm				
62-75-9	N-Nitrosodimethylamine	1 ppm				
71-43-2	Benzene	1 ppm				
75-01-4	Vinyl chloride	1 ppm				
75-07-0	Acetaldehyde	1 ppm				
75-09-2	Methylene chloride	1 ppm				
75-15-0	Carbon disulfide	10 ppm				
78-93-3	methyl ethyl ketone	1 ppm				
79-34-5	1,1,2,2,-Tetrachloroethane	1 ppm				
79-94-7	Tetrabromobisphenol A	20 ppm				
80-05-7	Bisphenol A	20 ppm				
84-66-2	Diethyl phthalate	5 ppm				
84-75-3	Di-n-Hexyl phthalate	5 ppm				
85-44-9	Phthalic anhydride	100 ppm				
86-30-6	N-Nitrosodiphenylamine	1 ppm				
87-68-3	Hexachlorobutadiene	30 ppm				
94-13-3	Propyl paraben	30 ppm				
94-26-8	Butyl paraben	30 ppm				
95-53-4	2-Aminotoluene	1 ppm	United States	Washington Children's Safe Product Act		Candidate List
95-80-7	2,4-Diaminotoluene	10 ppm				
99-76-3	Methyl paraben	30 ppm	United States	Washington Children's Safe Product Act		
99-96-7	p-Hydroxybenzoic acid	10 ppm				
100-41-4	Ethylbenzene	1 ppm				
100-42-5	Styrene	1 ppm				
104-40-5	4-Nonylphenol: 4-NP and its isomer mixtures including CAS 84852-15-3 and CAS 25154-52-3	10 ppm	United States	Washington Children's Safe Product Act		Candidate List

106-47-8	para-Chloroaniline	60 ppm	United States	Washington Children's Safe Product Act			
107-13-1	Acrylonitrile	1 ppm					
107-21-1	Ethylene glycol	5 ppm					
108-88-3	Toluene	1 ppm					
108-95-2	Phenol	60 ppm					
117-84-0	Di-n-octyl phthalate (DnOP)	5 ppm					
118-74-1	Hexachlorobenzene	30 ppm					
119-93-7	3,3'-Dimethylbenzidine and Dyes Metabolized to 3,3'-Dimethylbenzidine	10 ppm					
120-47-8	Ethyl paraben	30 ppm					
123-91-1	1,4-Dioxane	1 ppm					
127-18-4	Perchloroethylene	0.5 ppm					
131-55-5	Benzophenone-2 (Bp-2): 2,2',4,4'-Tetrahydroxybenzophenone	20 ppm					
140-66-9	4-tert-Octylphenol; 1,1,2,2,-Tetramethyl-4-butylphenol	10 ppm					
140-67-0	Estragole	10 ppm	United States	Washington Children's Safe Product Act			
149-57-5	2-Ethylhexanoic acid	1 ppm					
556-67-2	Octamethylcyclotetrasiloxane	10 ppm					
608-93-5	Benzene, pentachloro	1 ppm					
842-07-9	C.I. solvent yellow 14	1 ppm					
872-50-4	N-Methylpyrrolidone	50 ppm					

1163-19-5	2,2',3,3',4,4',5,5',6,6' Decabromodiphenyl ether; BDE-209	10 ppm	United States	Washington Children's Safe Product Act		Candidate List	
1763-23-1	Perfluorooctanyl sulphonic acid and its salts; PFOS	1 ppm	United States	Washington Children's Safe Product Act			
1806-26-4	Phenol, 4-octyl-	10 ppm					
5466-77-3	2-Ethyl-hexyl-4-methoxycinnamate	5 ppm					
7439-97-6	Mercury & mercury compounds including methyl mercury (22967-92-6)	0.5 ppm					
7439-98-7	Molybdenum & molybdenum compounds	1 ppm					
7440-36-0	Antimony & Antimony compounds	1 ppm					
7440-38-2	Arsenic & Arsenic compounds including arsenic trioxide (1327-53-3) & dimethyl arsenic (75-60-5)	1 ppm					
7440-43-9	Cadmium & cadmium compounds	1 ppm	United States	Washington Children's Safe Product Act		Candidate List	
7440-48-4	cobalt & cobalt compounds	1 ppm	United States	Washington Children's Safe Product Act			
25013-16-5	Butylated hydroxyanisole, BHA	10 ppm					
25637-99-4	Hexabromocyclododecane	10 ppm	United States	Washington Children's Safe Product Act		Candidate List	
26761-40-0	Diisodecyl phthalate (DIDP)	50 ppm	United States	Washington Children's Safe Product Act			
28553-12-0	Diisononyl phthalate (DINP)	50 ppm					
13674-87-8	tris(1,3-dichloro-2-propyl)phosphate	50ppm					

Appendix II Labelling: Appendix II lists regulations which have a labeling requirement that are not necessarily otherwise listed in the RSL.							
CAS Number	Chemical Name/Color Index Name	Restriction / Maximum Limit Triggering Labeling in Component	Country	Regulation	Test Method [detection limit] if any	Comment	GAFTI Comments
50-00-0	Formaldehyde (0 - 36 months)	20 ppm	Korea	Safety Quality Mark Act (KC Mark)		Age range off children's products in KC mark has been revised to: 3-14 years old Formaldehyde for children products (3-14 years): 75 mg/kg Innerwear and midwear (other than infant and children product): 75 mg/kg; outerwear (other than infant and children products): 300 mg/kg TBT for KC Mark infant product (0-36 months): 0.5 mg/kg; Others: 1.0 mg/kg	
	Formaldehyde (3 - 12 years)	75 ppm (innerwear), 300 ppm (outerwear); All Childrens' products: Max 75 ppm					
	Azo Dyes	30 ppm					
56573-85-4	Tributyltin (TBT)	0.5ppm for infant's 1.0 ppm for Children's					
1002-53-5	Dibutyltin (DBT) (0 - 36 months)	1 ppm					
624-49-7	Dimethyl Fumarate	0.1 ppm	Korea	Safety Quality Mark Act (KC Mark)		Phthalates requirement in KC Mark: Baby products (0-36 months): 0.1% (sum of DEHP, DBP, BBP, DIDP, DINP, DNOP) Children product (3-14 years): 0.1% (sum of DEHP, DBP, BBP)	
117-84-0	Di-n-octyl phthalate (DNOP)	0.10%					
117-81-7	Di (2-ethylhexyl) phthalate (DEHP)						
85-68-7	Benzyl Butyl phthalate (BBP)						
84-74-2	Di-n-butyl phthalate (DBP)						
68515-48-0 28553-12-0	Di-isononyl phthalate (DINP)						
68515-49-1 26761-40-0	Di-isodecyl phthalate (DIDP)						
32534-81-9	Penta-bromodiphenyl ether (pentaBDE) (0 - 12 years)						
32536-52-0	Octa-bromodiphenyl ether (octaBDE) (0 - 12 years)						
68112-30-1	TDBPP (0 - 12 years)						
	Disperse Dyes		Not Detected Max. 50 ppm Polyester, Nylon, Acrylic, Acetate, Triacetate, Vinyl chloride	Korea	Safety Quality Mark Act (KC Mark)		Disperse dyes only applies to baby product, children children and innerwear
7439-92-1	Lead (Pb) (0 - 12 years)	40 ppm- 100ppm (lead in substrate) 40 ppm- 90ppm (lead in coating)	Illinois, U.S.A	Lead Posioning Prevention Act		Toys with paints, child care articles, children's jewellery	
	Lead (Pb) (above 16 years)	600 ppm					
	NP/NPEO	100ppm	Korea	Safety Quality Mark Act (KC			

Change Log from RSL 18 to RSL 19	
Arylamines	Update: Most recent Textile test method ISO 14362-1 : 2017; Add: Vietnam Circular no.21/2017/TT-BCT- going into force May 1, 2018; Update: Most recent Textile test method for AAB ISO 14362-3 : 2017
Asbestos	n/a
Dioxins & Furans	Updated regulation: § 3 Abs 2, Anlage 1 Eintrag 2 ChemikalienverbotsVO
Disperse Dyes	n/a
Flame Retardants	Updated test method for Chlorinated paraffins (C10-C13): ISO 18219: 2015; Add Switzerland: ORRChem annex 1.1 (Art.3) for Chlorinated paraffins (C10-C13); Add 1.Heptabromodiphenyl ether (HeptaBDE) Cas.nr: 446255-22-7 207122-16-5, 68928-80-3 2.Hexabromodiphenyl ether (HexaBDE) Cas.nr 68631-49-2, 207122-15-4, 36483-60-0 3.Tetrabromodiphenyl ether (TetraBDE) Cas.nr 5436-43-1, 40088-47-9 4. Hexabromocyclododecane (HBCDD) Cas.nr 25637-99-4, 3194-55-6, 134237-50-6,134237-51-7 , 134237-52-8
Fluorinated Greenhouse Gases	n/a
Metals	n/a
Misc.	Add: SWITZERLAND: ORRChem textiles annex 1.13 (Art.3) to cover Blue Colorant Add: European Union REACH Regulation (EC) No 1907/2006 Annex XVII entry 68 (will apply from 4 July 2020) to cover Perfluorooctanoic acid (PFOA)
Organotin Compounds	n/a
Pesticides	Add: Pentachlorobenzene under Switzerland: ORRChem textiles annex 1.1 (Art.3)
Phthalates	Add: EU (REACH Annex XVII) for childcare articles which can be placed in the mouth by children intended to facilitate sleep, relaxation, hygiene, the feeding of children or sucking on the part of children to cover DINP, DIDP and DNOP Updated test method: Test method for EU: ISO14389: 2014 Add: Diisobutyl phthalate (DIBP) Cas.nr 84-69-5 which is on the Candidate List Add: test method: European test method ISO14389: 2014 Add: CPSC prohibits DEHP, DBP, BBP, DINP, DIBP, DPENP, DHEXP, DCHP in children's toys and child care articles (16 CFR 1307) Remove: DIDP and DnOP following CPSC decision to lift the interim ban from the CPSIA. The final rule removes the interim prohibition regarding DNOP and DIDP. CPSC has determined that these phthalates do not cause adverse effects on male reproductive development, and other risks attendant to their use are low.
Solvents	Add: Hexachlorobutadiene restricted for articles in the EU: POP regulation 850/2004 ANNEX I, also restricted in Switzerland: ORRchem annex 1.1 (art.3) and in Canada Prohibition of Certain Toxic Substances Regulations 2012 (SOR/2012-285) Add: Carbon Tetra Chloride and 1,1,1-Trichloroethane are also restricted in Switzerland
Appendix I: Reporting	n/a
Appendix II: Labelling	Add: NP/NPEO regulated by Korea Safety Quality Mark Act (KC Mark)

Disclaimer

NOTE: This Restricted Substance List (“RSL”) is provided by the American Apparel & Footwear Association (“AAFA”) for informational purposes only. This list represents the known and applicable standards at the time of publication; any inaccuracy or omission is not the responsibility of AAFA. Determination of whether and/or how to use all or any portion of this RSL is to be made in your sole and absolute discretion. Prior to using this RSL, you should review it with your own legal counsel. No part of this document constitutes legal advice. Use of this RSL is voluntary.

AAFA does not make any representations or warranties with respect to this RSL or its contents. The RSL is provided on an “AS IS” and on an “AS AVAILABLE” basis. AAFA HEREBY DISCLAIMS ALL WARRANTIES OF ANY NATURE, EXPRESS, IMPLIED OR OTHERWISE, OR ARISING FROM TRADE OR CUSTOM, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY, NONINFRINGEMENT, QUALITY, TITLE, FITNESS FOR A PARTICULAR PURPOSE, COMPLETENESS OR ACCURACY.

TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAWS, AAFA SHALL NOT BE LIABLE FOR ANY LOSSES, EXPENSES OR DAMAGES OF ANY NATURE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, PUNITIVE, DIRECT, INDIRECT OR CONSEQUENTIAL DAMAGES OR LOST INCOME OR PROFITS, RESULTING FROM OR ARISING OUT OF A COMPANY’S OR INDIVIDUAL’S USE OF THE RSL, WHETHER ARISING IN TORT, CONTRACT, STATUTE, OR OTHERWISE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.