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# **restricted substances list (RSL)**

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

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

<sup>3</sup> Appendix III lists non-regulated substances on the AFIRM RSL Guidance which do not otherwise appear in the AAFA RSL.

## Introduction

This 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.

It is our hope that this RSL will 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 regulations governing the amount of substances that are permitted in finished home textile, apparel and footwear products.

Our effort is to create a dynamic and useful instrument. 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 not regulatory concentration limits but may warrant evaluation for applicability.

1. The US 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.wewear.org/aafa-on-the-issues/category/?CategoryId=82>.
3. For more information on other non-regulated chemicals AAFA has developed a separate tool based on the work done by the AFIRM group. This tool can be found on our website (<https://www.wewear.org/assets/1/7/103112NonRegulatedRSL.pdf>) and includes chemicals that are neither regulated nor proven to be dangerous, but may be of note to the industry.

### 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 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](http://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. AAFA's mission is to promote and enhance its members' competitiveness, productivity and profitability in the global market by minimizing regulatory, commercial, political, and trade restraints.

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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.  <b>China restriction limit:</b> Textiles 20ppm Leather 30ppm  <b>EU restriction limit:</b> Textiles and Leather: 30ppm	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	Textiles (EU): EN 14362-1:2012 Leather (EU): EN ISO 17234-1: 2010	South Korea (KC Mark, for more information review Appendix II), and Indonesia	4- Amino azobenzene is not listed in GB20400-2006;  Only 23 arylamines are subject to this standard	
97-56-3	<i>o</i> -Aminoazotoluene				Test methods specific for 4-Aminoazobenzene confirmation: LFGB 82.02-9 LFGB 82.02-15 EN ISO 17234-2:2011	Vietnam temporary regulation Circular No. 32/2009/TT-BCT		
92-67-1	4-Aminodiphenyl				°EN 14362 - 3:2012 °GB/T 23344-2009 (pAAB) confirmation	Switzerland, Norway, and Taiwan, Turkey		
99-55-8	2-Amino-4-nitrotoluene					Indonesia: No.72/M-IND/PER/7/2012 SNI7617:2013		
90-04-0	<i>o</i> -Anisidine							
92-87-5	Benzidine							
106-47-8	<i>p</i> -Chloroaniline							
95-69-2	4-Chloro- <i>o</i> -toluidine					<u>Egypt:</u> ES 7266-4/2011 ES 7322/2011		
120-71-8	<i>p</i> -Cresidine					<u>Taiwan:</u> CNS 15290 CNS 15503 (children products)		
615-05-4	2,4-Diaminoanisole					CNS 8634 (leather casual shoes) CNS 10632 (leather shoes)		
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	<i>o</i> -Toluidine							
137-17-7	2,4,5-Trimethylaniline							
95-68-1	2,4-Xylydine (China only)							
87-62-7	2,6-Xylydine (China 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
1746-01-6 40321-76-4 51207-31-9 57117-31-4	Group 1)  2,3,7,8-Tetrachlorodibenzo-p-dioxin 1,2,3,7,8-Pentachlorodibenzo-p-dioxin 2,3,7,8-Tetrachlorodibenzofuran 2,3,4,7,8-Pentachlorodibenzofuran	Sum of Group 1:  1 µg/kg	Germany	German Chemialienverbots Verordnung(4)Dioxine	US EPA 8290 (industry practice-not specified by the regulation)			
39227-28-6 19408-74-3 57653-85-7 57117-41-6 70648-26-9 72918-21-9 57117-44-9 60851-34-5	Group 2)  1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin 1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin 1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin 1,2,3,7,8-pentachlorodibenzofuran 1,2,3,4,7,8-Hexachlorodibenzofuran 1,2,3,7,8,9-Hexachlorodibenzofuran 1,2,3,6,7,8-Hexachlorodibenzofuran 2,3,4,6,7,8-Hexachlorodibenzofuran	Sum of Group 1 & 2: 5 µg/kg						
35822-46-9 3268-87-9 67562-39-4 55673-89-7 39001-02-0	Group 3)  1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin 1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin 1,2,3,4,6,7,8-Heptachlorodibenzofuran 1,2,3,4,7,8,9-Heptachlorodibenzofuran 1,2,3,4,6,7,8,9-Octachlorodibenzofuran	Sum of Group 1, 2 & 3: 100 µg/kg						
50585-41-6 109333-34-8 67733-57-7 131166-92-2	Group 4)  2,3,7,8-Tetrabromodibenzo-p-dioxin 1,2,3,7,8-Pentabromodibenzo-p-dioxin 2,3,7,8-Tetrabromodibenzofuran 2,3,4,7,8-Pentabromodibenzofuran	Sum of Group 4: 1 µg/kg						
110999-44-5 110999-46-7 110999-45-6 107555-93-1	Group 5)  1,2,3,4,7,8-Hexabromodibenzo-p-dioxin 1,2,3,7,8,9-Hexabromodibenzo-p-dioxin 1,2,3,6,7,8-Hexabromodibenzo-p-dioxin 1,2,3,7,8-Pentabromodibenzofuran	Sum of Group 4 & 5: 5 µg/kg						

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	Germany	German Food, Feed and Commodities	§64 LFGB B82.02-10 DIN 54231	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	(below detection limits - see test method)		Law §30 (LFGB §30)				
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 as 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)	Prohibited	European Union	European Union POPs Regulation (EC) No. 850/2004, Annex I	Solvent extraction and GC-MS or LC-MS (industry practice - not specified by the regulation)	South Korea, and Canada	REACH: Also listed on the SVHC Candidate List POPs: Articles should not contain SCCPs that were placed on the market after January 10, 2013	
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]	
32534-81-9	Penta-bromodiphenyl ether (pentaBDE)	≤ 0.001% by weight	European Union	European Union POPs Regulation (EC) No. 850/2004,	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 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	

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
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  European Union REACH Regulation (EC) No. 1907/2006 Candidate List  Canada: Regulation Amending Schedule 2 Item 16 to the Canada Consumer Product Safety Act (TCEP) Effective June 22, 2014  The Canada requirement is only applied for children's products (< 3 years) made of polyurethane foam	
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 <sub>6</sub>	Prohibited	European Union	European Union  Regulation (EU) No 517/2014	Headspace for components  (industry practice - not specified by the regulation)		Regulation (EC) 842/2006 will be repealed by Regulation (EU) 517/2014 on January 1, 2015	
	<b>Hydrofluorocarbons (HFCs):</b>							
75-46-7	HFC-23 - CHF <sub>3</sub>							
75-10-5	HFC-32 - CH <sub>2</sub> F <sub>2</sub>							
593-53-3	HFC-41 - CH <sub>3</sub> F							
138495-42-8	HFC-43-10mee - C <sub>5</sub> H <sub>2</sub> F <sub>10</sub>							
354-33-6	HFC-125 - C <sub>2</sub> HF <sub>5</sub>							
359-35-3	HFC-134 - C <sub>2</sub> H <sub>2</sub> F <sub>4</sub>							
811-97-2	HFC-134a - CH <sub>2</sub> FCF <sub>3</sub>							
75-37-6	HFC-152a - C <sub>2</sub> H <sub>4</sub> F <sub>2</sub>							
430-66-0	HFC-143 - C <sub>2</sub> H <sub>3</sub> F <sub>3</sub>							
420-46-2	HFC-143a - C <sub>2</sub> H <sub>3</sub> F <sub>3</sub>							
431-89-0	HFC-227ea - C <sub>3</sub> HF <sub>7</sub>							
677-56-5	HFC-236cb - CH <sub>2</sub> FCF <sub>2</sub> CF <sub>3</sub>							
431-63-0	HFC-236ea - CHF <sub>2</sub> CHFCF <sub>3</sub>							
690-39-1	HFC-236fa - C <sub>3</sub> H <sub>2</sub> F <sub>6</sub>							
679-86-7	HFC-245ca - C <sub>3</sub> H <sub>3</sub> F <sub>5</sub>							
460-73-1	HFC-245fa - CHF <sub>2</sub> CH <sub>2</sub> CF <sub>3</sub>							
406-58-6	HFC-365mfc - CF <sub>3</sub> CH <sub>2</sub> CF <sub>2</sub> CH <sub>3</sub>							
	<b>Perfluorocarbons (PFCs):</b>							
75-73-0	Perfluoromethane - CF <sub>4</sub>							
76-16-4	Perfluoroethane - C <sub>2</sub> F <sub>6</sub>							
76-19-7	Perfluoropropane - C <sub>3</sub> F <sub>8</sub>							
355-25-9	Perfluorobutane - C <sub>4</sub> F <sub>10</sub>							
678-26-2	Perfluoropentane - C <sub>5</sub> F <sub>12</sub>							
355-42-0	Perfluorohexane - C <sub>6</sub> F <sub>14</sub>							
115-25-3	Perfluorocyclobutane - c-C <sub>4</sub> F <sub>8</sub>							

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
<b>Restrictions for Textiles</b>								
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	
7439-92-1	Lead (Pb)	100 ppm	Denmark	Statutory Order no. 1082 of September 13, 2007	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	Total Content: CPSC-CH-E1002-08.1 (http://www.gaf ti.org/template ?series=4&article=11)
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)	
7439-92-1	Lead (Pb)	0.2 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 woven infant wear and adornment products (≤ 24months) only  FZ/T 73025-2013 (Knitted garment and adornment for infant) Applies to infant knitted wear (≤ 36 months) or body height (≤ 100 cm)	
7440-47-3	Chromium	1.0 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 woven infant wear and adornment products (≤ 24months) only  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)  FZ/T 73025-2013 (Knitted garment and adornment for infant)	GB/T 17593.4 Textiles-Arsenic and Mercury		Applies to woven infant wear and adornment products (≤ 24months) only  FZ/T 73025-2013 (Knitted garment and adornment for infant) Applies to infant knitted wear (≤ 36 months) or body height (≤ 100 cm)	
7440-38-2	Arsenic	0.2 ppm (leachable)	China	FZ/T 81014-2008 - Infant's wear (woven)  FZ/T 73025-2013 (Knitted garment and adornment for infant)	GB/T 17593.4 Textiles-Arsenic and Mercury		Applies to woven infant wear and adornment products (≤ 24months) only  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
	<b>Restrictions for Textiles</b>							
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)	Indonesia	Regulation, No. 07/M-IND/PER/2/2014	ISO 105-E04 followed by ICP-OES/AAS analysis		Infant apparel (0-36 months)	
7440-50-8	Copper	25 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)	
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)	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			
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			
7440-48-4	Cobalt	1.0ppm (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			
7440-02-0	Nickel (Ni)	1.0 ppm (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			
7440-38-2	Arsenic (As)	100 mg/kg	China	GB 30585-2014 (Safety technical specification for children's footwear) - will apply on 1 Jan 2016	QB/T 4340 Footwear - Chemical test method - total heavy metal content - Inductively coupled plasma emission spectroscopy			
7439-92-1	Lead (Pb)	100 mg/kg	China	GB 30585-2014 (Safety technical specification for children's footwear) - will apply on 1 Jan 2016	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)	100 mg/kg	China	GB 30585-2014 (Safety technical specification for children's footwear) - will apply on 1 Jan 2016	QB/T 4340 Footwear - Chemical test method - total heavy metal content - Inductively coupled plasma emission spectroscopy			

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
<b>Restrictions for Leather</b>								
7440-43-9	Cadmium (Cd)	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 ppm	Denmark	Statutory Order no. 1082 of September 13, 2007	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	Extractable Content: EN71.3 Total Content: CPSC-CH-E1002-08.1 ( <a href="http://www.gaf ti.org/template ?series=4&amp;article=11">http://www.gaf ti.org/template ?series=4&amp;article=11</a> )
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 (applies from May 1, 2015)	
7440-38-2	Arsenic	100 mg/kg	China	GB 30585-2014 (Safety technical specification for children's footwear) - will apply on 1 Jan 2016	QB/T 4340 Footwear - Chemical test method - total heavy metal content - Inductively coupled plasma emission spectroscopy			
7439-92-1	Lead (Pb)	100 mg/kg	China	GB 30585-2014 (Safety technical specification for children's footwear) - will apply on 1 Jan 2016	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)	100 mg/kg	China	GB 30585-2014 (Safety technical specification for children's footwear) - will apply on 1 Jan 2016	QB/T 4340 Footwear - Chemical test method - total heavy metal content - Inductively coupled plasma emission spectroscopy			
18540-29-9	Chromium (Cr 6+) - hexavalent	10 mg/kg	China	GB 30585-2014 (Safety technical specification for children's footwear) - will apply on 1 Jan 2016	QB/T 22807 Leather and fur—Chemical tests—Determination of chromium VI content			

Metals								
Restrictions for Metal Parts								
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
7439-92-1	Lead (Pb)	100 ppm	Denmark	Statutory Order no. 1082 of September 13, 2007	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	Extractable Content: EN71.3 Total Content: CPSC-CH-E1001-08.1 ( <a href="http://www.gafati.org/template?series=4&amp;article=11">http://www.gafati.org/template?series=4&amp;article=11</a> )
7440-02-0	Nickel (Ni) (in metal items)	0.5 µg/cm <sup>2</sup> /week	European Union	European Union REACH Regulation (EC) No. 1907/2006 Annex XVII	Nickel release by EN 1811:2011 for non-coated item; EN 12472:2005+A1:2009 and EN 1811:2011 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	
		Prohibited	Taiwan	CNS 15290	CNS 4797-2	EU, Egypt, and South Korea	For all textile products and textile accessories	
7440-38-2	Arsenic (As)	100 mg/kg	China	GB 30585-2014 (Safety technical specification for children's footwear) - will apply on 1 Jan 2016	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)	100 mg/kg	China	GB 30585-2014 (Safety technical specification for children's footwear) - will apply on 1 Jan 2016	QB/T 4340 Footwear - Chemical test method - total heavy metal content - Inductively coupled plasma emission spectroscopy			
7440-43-9	Cadmium (Cd)	100 mg/kg	China	GB 30585-2014 (Safety technical specification for children's footwear) - will apply on 1 Jan 2016	QB/T 4340 Footwear - Chemical test method - total heavy metal content - Inductively coupled plasma emission spectroscopy			

Metals								
Restrictions for Plastics and Plastic Film								
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
7439-92-1	Lead (Pb)	100ppm	Denmark	Statutory Order no. 1082 of September 13, 2007	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.	Extractable Content: EN71.3 Total Content: CPSC-CH-E1002-08.1
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	
		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	
18540-29-9	Chromium (Cr6+) hexavalent	10ppm	Taiwan	CNS 15503	CNS 15331 Annex A CNS 15331 Annex B		For children products	
7440-38-2	Arsenic (As)	100 mg/kg	China	GB 30585-2014 (Safety technical specification for children's footwear) - will apply on 1 Jan 2016	QB/T 4340 Footwear - Chemical test method - total heavy metal content - Inductively coupled plasma emission spectroscopy		Applies to children's footwear ( $\leq 14$ years old) . Size of the shoes <250 mm (exclude children's rubber shoes)	
7439-92-1	Lead (Pb)	100 mg/kg	China	GB 30585-2014 (Safety technical specification for children's footwear) - will apply on 1 Jan 2016	QB/T 4340 Footwear - Chemical test method - total heavy metal content - Inductively coupled plasma emission spectroscopy			
7440-43-9	Cadmium (Cd)	100 mg/kg	China	GB 30585-2014 (Safety technical specification for children's footwear) - will apply on 1 Jan 2016	QB/T 4340 Footwear - Chemical test method - total heavy metal content - Inductively coupled plasma emission spectroscopy			

Metals								
Restrictions for Surface Coatings and Printing								
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	Comment	GAFTI Comments
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 ( <a href="http://www.gaf ti.org/template ?series=4&amp;article=11">http://www.gaf ti.org/template ?series=4&amp;article=11</a> )
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.	
		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	
<b>Soluble Heavy Metals</b>								
	China: PVC artificial leather	Lead: 90 mg/kg	China	GB 21550-2008	GB 21550 Clause 5.4			
		Cadmium: 75 mg/kg						
	Egypt: children less than 36 months footwear, size 26 and less	Antimony: 60 mg/kg	Egypt	ES 7322/2011	EN 71-3			
		Arsenic: 25 mg/kg						
		Barium: 1000 mg/kg						
	Taiwan: Children products up to age 14	Cadmium: 75 mg/kg	Taiwan	CNS 15503 (children's product)	CNS 4797-2			
Chromium: 60 mg/kg								
Lead: 90 mg/kg								
	Mercury: 60 mg/kg							
	Selenium: 500 mg/kg							

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
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	Poland, China, Russia, Finland, Norway, France, Netherlands, Austria, Lithuania, Germany, New Zealand, South Korea, Vietnam, Taiwan, Egypt, and Indonesia	Poland and 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	
	>36 months old (with direct skin contact)	75 ppm (detection limit is 16 mg/kg) (textiles)	Japan	Japanese Law 112	CNS 15579		Taiwan regulates indoor decorative textile with a limit of 300ppm  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)	
	>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		GB 30585 regulates Formaldehyde in children's shoes (≤14 years old) , Size of the shoes <250 mm (will apply on 1 Jan 2016)	
50-00-0	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			
50-00-0	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	

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
50-00-0	Formaldehyde (non-skin contact components on children's athletic shoes)	≤ 300 ppm	China		Textile: GB/T 2912.1-2009			
50-00-0	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			
2795-39-3	Perfluorooctane sulfonate (PFOS)	1 µg/m <sup>2</sup> (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 <sup>2</sup> (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		Effective June 1, 2014 PFOA is added to Norwegian Product Regulation with different limits in various materials	
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, and Egypt	Restriction of Blue Colorant in EU applies to substances and mixtures only. (Egypt applies to finished textile products)	

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
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	BS EN ISO 18254 Textiles- Methods for the Detection and Determination of alkyl phenol ethoxylates APEOS	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	
	Nonyl phenoethoxylates							
75-01-4	Vinyl Chloride Monomer (VCM)	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, not less than 3.5	South Korea	KC Mark	KS K ISO 3071 / ISO 3071			
		1 mg/kg 5 mg/kg	Egypt China	ES 6535/2008 ES 7322/2011 GB 21550-2008	ISO 4045 ISO 6041 / GB/T 4615-1984		Germany- Bedarfsgegenstande Verordnung" German Consumer Goods Ordinance	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-Nitrosodimethylamine	Not detected (detection limit: 0.5 mg/kg)	China	GB 25036-2010 GB 25038-2010 GB 30585-2014 (will apply on 1 Jan 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-Nitrosodiethylamine									
621-64-7	N-Nitrosodipropylamine									
924-16-3	N-Nitrosodibutylamine									
100-75-4	N-Nitrosopiperidine									
930-55-2	N-Nitrosopyrrolidine									
59-89-2	N-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	Taiwan and the European Union	CNS 3478 (Plastic shoes)	CNS 3478 Clause 6.18					
208-96-8	Acenaphthylene (Taiwan only)									
83-32-9	Acenaphthene (Taiwan only)									
86-73-7	Fluorene (Taiwan only)	EU: Articles in direct skin contact with: 1 mg/kg (each) Childcare article: 0.5 mg/kg (each)		European Union	European Union REACH Regulation (EC) No 1907/2006 Annex XVII				ZEK 01.4-08 (recommended)	Effective date: December 27, 2015
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)									
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		
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							
50-29-3	Dichloro-diphenyl-trichloro ethane (DDT)							
60-57-1	Dieldrin							
72-20-8	Endrine							
76-44-8	Heptachlorine (Switzerland and EU POPs)							
1024-57-3	Epoxy-heptachlorine	Prohibited	EU	European Union POPs Regulation (EC) No. 850/2004 Annex I				
115-29-7	Endosulfan and its isomers							
959-98-8								
33213-65-9								
608-93-5	Pentabromobenzene	≤ 30 ppm	Japan	Japan Law for the Control of Household Products			Textile Products Only	
36355-01-8	Hexabromobiphenyl							
63405-99-2	4,6-Dichloro-7 (2,4,5-trichloro-phenoxy) 0-2-trifluoro methyl benz-imidazole (DTTB)	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				
118-74-1	Hexachlorobenzene (Switzerland and EU POPs)							
608-73-1	Hexachlorocyclohexane (HCH, all isomers) except gamma-hexachlorocyclohexane (except linande [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)							

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
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	Halogenated biphenyls, including							
53469-21-9 and Various	Polychlorinated biphenyl (PCB) (both Switzerland)							
Various	Halogenated terphenols, including							
Various	Polychlorinated terphenyl (PCT)							
Various	Halogenated naphthalenes							
Various	Halogenated diarylalkanes							
	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		

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
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 184141.1 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, Spain	European Union REACH regulation (EC) No. 1907/2006 Annex XVII, limit 0.1 mg/kg  Spain (1229 Resolution of 22 December 2008)	CNS 15331 Annex C	South Korea (KC Mark, for more information review Appendix II), Norway, and Taiwan	Spain (Footwear), EU (Products), France: Are suspended for one year the importation and marketing for free or expensive, seats and footwear containing dimethyl fumarate (EC number: 210-849-0).  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	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)	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	In South Korea, applies to baby clothing (less than 24 months)	
117-84-0	Di-n-octyl phthalate (DNOP)	For E.U DEHP+DBP+BBP 0.1% by weight					In the U.S., DEHP, DBP and DNOP are restricted in child care articles (3 years and under) that facilitate sleep or feeding	
85-68-7	Benzyl Butyl phthalate (BBP)	DINP+DIDP+DNOP: 0.1% by weight					Unclear which footwear and apparel articles are covered	
84-74-2	Di-n-butyl phthalate (DBP)						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  Examples: Child bibs, infant sleeping bag  DEHP, BBP, and DBP are listed under REACH Annex	
68515-48-0 28553-12-0	Di-isononyl phthalate (DINP)						In the U.S. and the EU DINP, and DIDP-are restricted in toys and child care articles that can be placed in the mouth	
68515-49-1 26761-40-0	Di-isodecyl phthalate (DIDP)		China - GB 30585-2014 regulate Infant's footwear (0-36 months, footwear ≤170mm): DEHP, DBP, BBP, DINP, DIDP, DNOP: 0.1% by weight Children's footwear (36 months – 14 years, footwear: >170mm, but ≤ 250mm): DEHP, DBP, BBP: 0.1% By weight					
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)							

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
68515-42-4	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP)	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			
71888-89-6	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DHP)							
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							

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
76-01-7	Pentachloroethane	0.1% (mass)- Each	EU and Japan	Germany - Chemikalienverbot	Headspace for components (industry)	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		
56-23-5	Carbon Tetrachloride					Regulation (EC) No. 1005/2009		
71-55-6	1,1,1-Trichloroethane					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)			Japan Law for the Control of Household Products Containing Harmful Substances				



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
	Volatile organics	≤20 g/m <sup>2</sup>	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](http://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

**US** – United States

**µg/cm<sup>2</sup>/week**—microgram per square centimeter per week

**µg/g**—microgram per gram

**µg/kg**—microgram per kilogram

**µg/m<sup>2</sup>**—microgram per square meter

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	GAFTI Comments
121-14-2*	2,4-Dinitrotoluene	over 0.1%	EU	REACH SVHC (Substances of Very High Concern)			
101-77-9*	4,4'- Diaminodiphenylmethane (MDA)						
81-15-2*	5-tert-butyl-2,4,6-trinitro-m-xylene (musk 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 <sub>2</sub> O+K <sub>2</sub> 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						

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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	GAFTI Comments
91995-17-4	Anthracene oil, anthracene paste, distn. lights	over 0.1%	EU	REACH SVHC (Substances of Very High Concern)		Washington (US)	
90640-82-7	Anthracene oil, anthracene-low						
85-68-7*	Benzyl butyl phthalate (BBP)						
117-81-7*	Bis (2-ethylhexyl)phthalate (DEHP)						
56-35-9	Bis(tributyltin)oxide (TBTO)						
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)						
84-69-5*	Diisobutyl phthalate						
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						
115-96-8*	Tris(2-chloroethyl)phosphate						

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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	GAFTI Comments
Extracted from Index no. 650-017-00-8	Zirconia 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, silicon and zirconium 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 <sub>2</sub> O+K <sub>2</sub> O+CaO+MgO+BaO) content less or equal to 18% by weight						
110-80-5*	2-Ethoxyethanol						
109-86-4*	2-Methoxyethanol					Washington (US)	
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						

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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	GAFTI Comments
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						
111-15-9	2-Ethoxyethyl acetate						
1163-19-5	Bis(pentabromophenyl) ether (deca-BDE)						
72629-94-8	Pentacosafuorotridecanoic acid						
2058-94-8	Henicosafuoroundecanoic acid						
307-55-1	Tricosafuorododecanoic acid						
376-06-7	Heptacosafuorotetradecanoic 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))						



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	GAFTI Comments
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						

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	GAFTI Comments
12578-12-0	Dioxobis(stearato)trilead						
91031-62-8	Fatty acids, C16-18, lead salts						
13814-96-5	Lead bis(tetrafluoroborate)						
20837-86-9	Lead cyanamate						
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 <sub>2</sub> Si <sub>2</sub> O <sub>5</sub> ), 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						

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	GAFTI Comments
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)						
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	over 0.1%	EU	REACH SVHC (Substances of Very High Concern)			
111-96-6	Bis(2-methoxyethyl) ether						
11103-86-9	Potassium hydroxyoctaoxodizincate 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(2methoxyethyl) 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)						

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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	GAFTI Comments
15245-44-0	Lead Styphnate	over 0.1%	EU	REACH SVHC			
101-14-4	2,2-dichloro-4,4-methylenedianiline						
112-49-2	1,2-bis(2methoxy-ethoxy) ethane						
110-71-4	1,2-dimethoxyethane; ethylene						
561-41-1	4,4'-bis(dimethylamino)-4''-						
90-94-8	4,4'-bis(dimethylamino)						
2580-56-5	[4-[[4-anilino-1-naphthyl]]4-						
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	over 0.1%	EU	REACH SVHC			
3825-26-1	Ammonium pentadecafluorooctanoate (APFO)						
335-67-1	Pentadecafluorooctanoic acid (PFOA)						
131-18-0	Dipentyl phthalate (DPP)						

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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	GAFTI Comments
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)						
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)						

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	GAFTI Comments
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					
95-80-7	2,4-Diaminotoluene	10 ppm					
99-76-3	Methyl paraben	30 ppm					
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					
106-47-8	para-Chloroaniline	60 ppm					
107-13-1	Acrylonitrile	1 ppm					
107-21-1	Ethylene glycol	5 ppm					
108-88-3	Toluene	1 ppm					

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	GAFTI Comments	
108-95-2	Phenol	60 ppm	United States	Washington Children's Safe Product Act				
117-84-0	Di-n-octyl phthalate (DnOP)	5 ppm						
118-74-1	Hexachlorobenzene	30 ppm						
119-93-7	Metabolized to 3,3'-	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						Candidate List
140-67-0	Estragole	10 ppm						
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	Decabromodiphenyl ether; BDE-209	10 ppm						Candidate List
1763-23-1	Perfluorooctanyl sulphonic acid and its salts; PFOS	1 ppm						
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						Candidate List
7440-48-4	cobalt & cobalt compounds	1 ppm						
25013-16-5	Butylated hydroxyanisole, BHA	10 ppm						
25637-99-4	Hexabromocyclododecane	10 ppm						Candidate List
26761-40-0	Diisodecyl phthalate (DIDP)	50 ppm						
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 product in KC mark has been revised to: 3-14 years old Formaldehyde for children product (3-14 years): 75 mg/kg Innerwear and midwear (other than infant and children product): 75 mg/kg; outerwear (other than infant and children product): 300 mg/kg						
	Formaldehyde (3 - 12 years)	75 ppm (innerwear), 300 ppm (outerwear)										
	Azo Dyes	30 ppm										
56573-85-4	Tributyltin (TBT)	0.5ppm									TBT for KC Mark infant product (0-36)	
1002-53-5	Dibutyltin (DBT) (0 - 36 months)	1 ppm										
624-49-7	Dimethyl Fumarate	0.1 ppm										
117-84-0	Di-n-octyl phthalate (DNOP)	0.10%									Phthalates requirement in KC Mark:  Baby products (0-36 months): 0.1% (sum of DEHP, DBP, BBP, DIDP, DINP, DNOP)	
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	Di-isononyl phthalate (DINP)											
28553-12-0	Di-isodecyl phthalate (DIDP)											
68515-49-1 26761-40-0	Di-isodecyl phthalate (DIDP)											
32534-81-9	Penta-bromodiphenyl ether (pentaBDE) (0 - 12 years)	Banned (only applicable to flame retardant products)										
32536-52-0	Octa-bromodiphenyl ether (octaBDE) (0 - 12 years)											
68112-30-1	TDBPP (0 - 12 years)											
	Disperse Dyes	Not Detected									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 Positioning Prevention Act			
	Lead (Pb) (above 12 years)	600 ppm										



<b>Appendix III Non-Regulated: This appendix lists those non-regulated substances on the AFIRM RSL Guidance which do not otherwise appear in the AAFA RSL.</b>					
<b>CAS Number</b>	<b>Chemical Name/Color Index Name</b>	<b>Restriction / Maximum Limit</b>	<b>Test Method [detection limit] if any</b>	<b>Comment</b>	<b>GAFTI Comments</b>
7440-48-4	Cobalt (Co) extractable	1 ppm babies, 4 ppm adults	EN ISO 17294-2		
90-43-7	Ortho-phenylphenol (o-PP)	50 ppm	GC-MS LC-MS for confirmation		
25167-82-2	Trichlorophenol	.05 ppm babies, 0.5 ppm adults	GC-MS LC-MS for confirmation		
624-18-0	Benzene-1,4-diamine dihydrochloride	1000 ppm	GC-MS		
103-33-3	Azobenzene	1000 ppm	GC/MS or LC/MS		
106-50-3	p-Phenylendiamine	Non-Detect	see benzene diamine		
Multiple	Chlororganic carriers	1 ppm	DIN 54232		
100-44-7	Benzyl-chloride	4 ppm	GC/MS or LC/MS		
N/A	Monobutyltin	.5 ppm (babies) 1 ppm (adults)	ISO 17353		
Multiple	Sum of medium chained (MCCP's) C14-17	1000 ppm	GC/MS using NCI (negative chemical ionization)		
68-12-2	Dimethylformamide	Non-Detect	GC/MS		
1321-70-5	Tricyclohexyltin (TCyHT)	Non-Detect	ISO 17353		
250-252-89-2	Trioctyltin	Non-Detect	ISO 17353		
N/A	Tripropyltin (TPT)	Non-Detect	ISO 17353		
80-08-7	Bisphenol-A	Non-Detect	GC/MS		
Multiple	Isocyanates	Non-Detect	free: HPLC; blocked: GC-MS with injector block temperature at 300° C; confirmation at 180° C		

<b>Appendix III Non-Regulated: This appendix lists those non-regulated substances on the AFIRM RSL Guidance which do not otherwise appear in the AAFA RSL.</b>					
Multiple	Biocides	1 ppm	GC/MS resp. LC/MS		
Multiple	Chlorinated Aromatics	1 ppm	DIN 54232		
79-06-1	Acrylamide Monomer	0.1 ppm	GC/MS		
107-13-1	Acrylonitrile Monomer	1 ppm	GC/MS		
140-88-5	Ethyl acrylate	10 ppm	GC/MS		
Multiple	Acrylates - Monomer	50 ppm	GC/MS		
92-52-4	Biphenyl	50 ppm	GC/MS		
Multiple	Sensitizing Isothiazolinones	50 ppm	GC/MS, confirmation: LC/MS		
98-86-2	Acetophenone	75 ppm	GC-MS		
617-94-7	2-Phenyl-2-propanol	75 ppm	GC-MS		

<b>Changes from RSL 15 to RSL 16</b>	
Arylamines	Added GB 30585-2014 (Safety technical specification for children's footwear) added
Asbestos	No changes
Dioxins & Furans	No changes
Disperse Dyes	No changes
Flame Retardants	No changes
Fluorinated Greenhouse Gases	Added Regulation (EU) No 517/2014; Removed (EC) No. 842/2006
Metals	Added GB 30585-2014 (Safety technical specification for children's footwear)
Misc.	GB 30585-2014 (Safety technical specification for children's footwear) added
Organotin Compounds	No changes
Pesticides	Removed: Belgium: The Minister for Public Health and the Minister for Consumer Protection, The Minister for Public Health and the Minister for Consumer Protection, Ministerial Decree concerning the prohibition of placing articles and products containing DMF on the market. Belgian Official Journal , 12.1.2009
Phthalates	No changes
Solvents	No changes

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