VAUDE MRSL

Manufacturing Restricted Substance List
Edition 1.0

Without the use of chemicals in textile manufacturing, the performances requested by the consumer can't be attained. However, chemicals can be harmful to the workers, consumers or even the environment and the correct use of chemicals requires certain know-how to prevent any risks to workers, consumers or the environment.
在现代纺织业的生产中，为了满足消费者对性能的需求，化学品的使用是不可避免的。可是，化学品对于生产工人、消费者甚至于环境都可能造成严重的危害。因此我们需要掌握足够的专业知识来避免这些问题。

The management of chemicals is very important to protect the consumer and all involved people as well as the environment during the production phase. To help suppliers, VAUDE has developed a minimum standard for suppliers regarding primarily consumer safety of chemicals on finished products. Other aspects like environmental performance in the production process are not implemented in this Restricted Substance List.
在整个产业链中，化学品的管控是一个非常关键的环节。为了方便供应商进行此项工作并最大限度的保护消费者，VAUDE 制定了化学品的限定值列表。其他关于产品性能或环境保护需求等其他要求不属于本文所属范畴。

The Manufacturing Restricted Substance List (MRSL) is a minimum requirement for suppliers to guarantee compliance with the VAUDE standards. It is recommended to adopt additional policies, particularly regarding water emission, air emission, occupational health and resource productivity in order to provide risk free products.
供应商限制物质列表（MRSL）是 VAUDE 对供应商提供合乎 VAUDE 标准的最低要求。同时该要求也建议供应商采取其他的额外措施，特别是废水排放、废气排放、职业健康和资源利用的相关措施，以提供合格安全的产品。

VAUDE announced its Greenpeace Detox Commitment in which the company voluntarily agrees to eliminate all hazardous chemicals in its supply chain by 2020. "Zero Discharge" is the joint goal of VAUDE and Greenpeace. With this commitment, VAUDE is taking clear responsibility for the entire lifecycle of its products, which also includes clean and safe production throughout the supply chain.

As first step VAUDE recommends to adopt the bluesign® standard. The independent bluesign® standard takes a solution-oriented approach that relates exclusively to problem materials and substances relevant to textiles. In particular the bluefinder™, an online chemicals components

selection tool, allows to quickly find "bluesign® approved" components that will lead to end-products that comply with the MRSL at hand, provided they are applied according to the suppliers recommendations.
VAUDE 已经与绿色和平组织签署并发布了 Detox 承诺书，于 2020 年前清除供应链中相关有害物质。"零排放"是 VAUDE 和绿色和平组织共同的目标。为此 VAUDE 要对产品的整个生命周期负责，包括安全绿色的生产和供应链。第一步，VAUDE 建议采用 bluesign®标准。该标准以解决方案为向导，系统化的解决纺织品中材料和成分的安全问题。利用名为 bluefinder™的在线工具可以便捷的找到 bluesign®认证的产品，同时也符合本 MRSL 标准。

The limits and restrictions have to be applied for each individual component of an intermediate or finished product.
本文涉及到的限值及限定针对中间品或最终产品和每个组件。

Producing according to the MRSL is a mandatory requirement for doing business with VAUDE.
此 MRSL 文件所含要求是与 VAUDE 开展商业往来所必需遵从的强制要求。

In addition to the VAUDE MRSL the supplier has to be aware of Regulation EC No 1907/2006 "REACH". The supplier shall inform VAUDE if supplied articles contain SVHCs listed in the ECHA candidate list with a concentration above 0.1%.
Suppliers have to take care that they are aware of the actual ECHA candidate list see http://echa.europa.eu/web/guest/candidate-list-table
供应商除 VAUDE MRSL 以外，仍需注意欧盟管控条例 EC No1907/2006，简称 REACH。若商品中含有高关注物质列表（SVHC）中所含物质，且浓度高于 0.1%，供应商必须向 VAUDE 提供相关详细信息。关于 ECHA 的高关注度物质列表具体信息请看 ECHA 网站：
http://echa.europa.eu/web/guest/candidate-list-table。

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注意：本文件为中英文对照版，若有任何疑议，以英文为准。

VAUDE MRSL

Supplier Compliance Certificate

供应商符合性声明书

Company Name:

公司名称

Address:

地址

Telephone:

电话

Fax:

传真

Contact Person:

联系人

Please describe in short words, how compliance with the VAUDE Restricted Substance List is guaranteed in your manufacturing site:

请简要描述，在贵司之生产厂地如何保障遵守 VAUDE 限用物质清单：

MRSL Compliance

MRSL 确认

We certify that all materials supplied to VAUDE will meet the requirements as outlined in the attached Restricted Substance List (the "MRSL") including all appendices. Our signature guarantees compliance for all current and future materials supplied to VAUDE.

我们保证提供给 VAUDE 的所有材料将满足甚至高于所有附件所规定的限用物质清单（MRSL）要求。

我们现签署并对今后所有提供给 VAUDE 的材料进行符合性担保。

_____ _____

Signature 签名 Date 日期

_____ _____

Printed Name 姓名（印刷体） Title 职位

SVHC Compliance

SVHC 确认

We certify that concentration of SVHCs listed in the newest ECHA candidate list is below 0.1% in all articles supplied to VAUDE.

Note: If noticeable SVHC concentration is known (esp. above a level of 0.1 %) it must be informed automatically by the supplier.

我方证实所有供给 VAUDE 的产品包含的在最新 ECHA 候选目录中列出的 SVHC 物质浓度小于 0.1%。
注意：如果 SVHC 列表中物质浓度可测出（特别是超过 0.1%），供应商必须主动通知 VAUDE。

Signature 签名	Date 日期
Printed Name 姓名（印刷体）	Title 职位

Identification of substances **物质鉴定**

The following general approach is proposed to identify whether or not substances, mentioned in the MRSL are contained in your materials:

Narrow down the range of substances which could be present in the articles and thus have to be analyzed by applying common knowledge about what could possibly be present in the materials (as for an example: a phthalate would never be present in a pure metal).

Exhaust options for obtaining information via the supply chain.

Only as a last resort, conduct targeted analysis to identify whether or not suspected substances listed in the MRSL are present.

The testing matrix (see Annex II) may help to define the relevant items for testing procedure.

以下的建议为确定 MRSL 中包含的物质是否存在于产品中的一般方法。

首先用正确的常识来判断并缩小需关注物质是否存在于某些产品中（举例：邻苯二甲酸盐绝对不会存在于纯金属中）。

通过了解供应链来分析产品。

直接分析检验产品是否含有 MRSL 所列物质为最终手段。

检测表格（见附件II）对进行产品检测提供有效信息

Group / Substances 组别/物质	CAS-Number	Input water /output (wastewater) (µg/l) 入水/出水（废水）	Testing methods 测试方法	sludge mg/kg 淤泥	Testing methods 测试方法	Finished Articles / Textiles mg/kg 成品/纺织品	Finished Articles / Shoes mg/kg 成品/鞋类	Testing methods 测试方法	Status Banned / Phased out 禁用/淘汰情况
1. Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs) 烷基酚 和烷基酚聚氧乙烯醚									
see Appendix A 见附录 A	**See Appendix**	1 (for each) 1 （每个）	DIN EN ISO 18857 followed by Liquid Chromatography Mass Spectrometry (LC-MS) Analysis $NPEO_{(1+2)}$: GC-MS	1 (for each) 1 （每个）	DIN EN ISO 18857 followed by Liquid Chromatography Mass Spectrometry (LC-MS) Analysis $NPEO_{(1+2)}$: GC-MS	10 -100	100	Solvent extraction// GC-MS (Aps) LC-MS (APEOs)	Usage Ban 禁用

Group / Substances 组别/物质	CAS-Number	Input water /output (wastewater) (µg/l) 入水/出水（废水）	Testing methods 测试方法	sludge mg/kg 淤泥	Testing methods 测试方法	Finished Articles / Textiles mg/kg 成品/纺织品	Finished Articles / Shoes mg/kg 成品/鞋类	Testing methods 测试方法	Status Banned / Phased out 禁用/淘汰情况
2. Chlorobenzene and Chlorotoluens 氯代苯酚和氯代甲苯									
see Appendix D 见附录 D	See Appendix	Chlorobenzenes: 0.02 / Chlorotoluenes: 1 for some substances	Liquid Extraction GC-MS	Chlorobenzenes: 0.5 / Chlorotoluenes: 1 for some substances	Liquid Extraction GC-MS	Chlorobenzenes: 1 / Chlorotoluenes: 1 Sum all < 5 mg/kg	Chlorobenzenes: 1 / Chlorotoluenes: 1 Sum all < 5 mg/kg	DIN54232-201 or Solvent Extraction //GC-MS	
3. Chlorinated Solvents 含氯溶剂									
see Appendix R 见附录 R	See Appendix	1 (each) 1 （每个）	HS-GC/MS Analysis	0,5 (each) 0.5 （每个）	HS-GC/MS Analysis	Usage Ban 禁用	Usage Ban 禁用	Solvent Extraction // GC-MS	Usage Ban 禁用
4. Chlorophenols 氯代苯酚									
see Appendix S 见附录 S	See Appendix	0.5 (each) 0.5 （每个）	Liquid Extraction / derivation // GC-MS	0.05 (each) 0.05 （每个）	Liquid Extraction / derivation // GC-MS	Usage Ban 禁用 traces sum 0.1 痕量总计 0.1	Usage Ban 禁用 sum 0.5 总计 0.5	BVL 82.02-8:2001 Leather: ISO 17070:2012 (Draft)	Usage Ban 禁用

Group / Substances 组别/物质	CAS-Number	Input water /output (wastewater) (µg/l) 入水/出水（废水）	Testing methods 测试方法	sludge mg/kg 淤泥	Testing methods 测试方法	Finished Articles / Textiles mg/kg 成品/纺织品	Finished Articles / Shoes mg/kg 成品/鞋类	Testing methods 测试方法	Status Banned / Phased out 禁用/淘汰情况
5. SCCP 短链石蜡	85535-84-8	0,5 (sum) 0.5 （总计）	Extraction with Toluene // GC-MS resp. LC/MS	1 (sum) 1 （总计）	Extraction with Toluene // GC-MS resp. LC/MS	no data yet, has to be fixed until mid 2017 暂无数据，待 2017 年中确定	no data yet, has to be fixed until mid 2017 暂无数据，待 2017 年中确定	no data yet, has to be fixed until mid 2017 暂无数据，待 2017 年中确定	
6. Amines (associated with Azo dyes) 芳香胺（偶氮染料相关）									
see Appendix B 见附录 B	See Appendix	1	With reference to EN 14362:1+3 // GC-MS and HPLC	1	With reference to EN 14362:1+3 // GC-MS and HPLC	Usage Ban traces < 30 禁用 痕量< 30	Usage Ban traces < 30 禁用 痕量< 30	With reference to EN 14362:1+3 // GC-MS and HPLC Leather: EN ISO 17234: 1+2	Usage Ban 禁用
Subgroup: Dyes – Carcinogenic 副组：致癌染料									
see Appendix E and G 见附录 E 和 G	See Appendix	1	Best current testing technology 最佳现有技术	5	Best current testing technology 最佳现有技术	Usage Ban Traces:20 禁用 痕量：20	Usage Ban Traces:20 禁用 痕量：20	DIN 54231	Usage Ban 禁用
Subgroup: Dyes – Disperse 副组：分散染料									
see Appendix F 见附录 F	See Appendix	1: for each of C.I. Disperse Yellow 3 and C.I. Disperse Blue 1	Best current testing technology 最佳现有技术	5	Best current testing technology 最佳现有技术	Usage Ban 禁用	Usage Ban 禁用	DIN 54231	Usage Ban 禁用

Group / Substances 组别/物质	CAS-Number	Input water /output (wastewater) (µg/l) 入水/出水（废水）	Testing methods 测试方法	sludge mg/kg 淤泥	Testing methods 测试方法	Finished Articles / Textiles mg/kg 成品/纺织品	Finished Articles / Shoes mg/kg 成品/鞋类	Testing methods 测试方法	Status Banned / Phased out 禁用/淘汰情况
7. Brominated and Chlorinated Flame Retardants 含溴含氯阻燃剂									
see Appendix I 见附录 I	See Appendix	5 for each 每个 5	Solvent extraction GC-MS/LC-MS	5 for each 每个 5	Solvent extraction GC-MS/LC-MS	usage Ban DL: 5 禁用 检出值：5	usage Ban DL: 5 禁用 检出值：5	Solvent extraction GC-MS/LC-MS	Usage Ban 禁用
Subgroup: other flame retardants 副组：其他阻燃剂									
see Appendix I 见附录 I	See Appendix	5 for each 每个 5	Solvent extraction GC-MS/LC-MS	5 for each 每个 5	Solvent extraction GC-MS/LC-MS	usage Ban DL: 5 禁用 检出值：5	usage Ban DL: 5 禁用 检出值：5	Solvent extraction GC-MS/LC-MS	Usage Ban 禁用
8. Glycols 乙二醇	**111-96-6, 110-80-5, 111-15-9, 10-71-4, 109-86-4, 110-49-6, 1589-47-5, 70657-70-4, 112-49-2**	**10 for each 每个 10 except for 2-methoxypropylacetate: 5**		**10 for each 每个 10 except for 2-methoxypropylacetate 1**		**Both: 1000 总计：1000**	**2-ethoxyethylacetate: 500 Bis-(2-methoxyethyl) ether: 1000**		

Group / Substances 组别/物质	CAS-Number	Input water /output (wastewater) (µg/l) 入水/出水（废水）	Testing methods 测试方法	sludge mg/kg 淤泥	Testing methods 测试方法	Finished Articles / Textiles mg/kg 成品/纺织品	Finished Articles / Shoes mg/kg 成品/鞋类	Testing methods 测试方法	Status Banned / Phased out 禁用/淘汰 情况
9. Solvents 溶剂									
see Appendix T 见附录 T	See Appendix	no data yet, has to be fixed until mid 2017 暂无数据，待 2017 年中确定		no data yet, has to be fixed until mid 2017 暂无数据，待 2017 年中确定		Details in Table Appendices T 详细信息见附录 T		Solvent extraction GC-MS	partly Usage Ban 部分禁用
10. Organotin Compounds 有机锡									
see Appendix U 见附录 U	See Appendix	0.1 (each) or best current technology 0.1 （每个）或最佳现有技术	DIN EN 17353 // GC-MS	1 (each) or best current technology 0.1 （每个）或最佳现有技术	DIN EN 17353 // GC-MS	range from 0.5 to 2 (MBT 1, MOT 2, DOT 1) 0.5 到 2（MBT 1, MOT 2, DOT 1）	range from 0.5 to 2 (MBT 1, MOT 2, DOT 1) 0.5 到 2（MBT 1, MOT 2, DOT 1）	Solvent Extraction // GC-MS or LC-MS or Multiple Headspace GC-MS	
11. Polycyclic Aromatic Hydrocarbons (PAHs) 多环芳烃									
see Appendix V 见附录 V	See Appendix	0.5 (each), 0.5 （每个） Naphthalene: 2	Best current testing technology 最佳现有技术	0.5 (each), 0.5 （每个） Naphthalene: 1	Best current testing technology 最佳现有技术	range 0.5-1 限制范围 0.5-1 Naphthalene: 50	sum all 10 总和 10 Naphthalene: 500	Solvent Extraction /GC-MS	

Group / Substances 组别/物质	CAS-Number	Input water /output (wastewater) (µg/l) 入水/出水（废水）	Testing methods 测试方法	sludge mg/kg 淤泥	Testing methods 测试方法	Finished Articles / Textiles mg/kg 成品/纺织品	Finished Articles / Shoes mg/kg 成品/鞋类	Testing methods 测试方法	Status Banned / Phased out 禁用情况/淘汰
12. Perfluorinated and Polyfluorinated Chemicals (PFCs)含氟化合物									
see Appendix W 见附录 W	See Appendix	0.01 each , FTOH 0.1 each	CEN/TS 15968:2010 LC/MS	0.01 each , FTOH 0.1 each	Solvent Extraction EN/TS 15968:2010 //LC-MS	Usage Ban Wi 18 collection apparell, tents, shoes, backpacks 2020 latest W18 除鞋子外禁用，鞋子最迟 2020 禁用	Usage Ban Wi 18 collection apparell, tents, shoes, backpacks 2020 latest W18 除鞋子外禁用，鞋子最迟 2020 禁用	Solvent Extraction EN/TS 15968:2010 //LC-MS	Usage Ban Wi 18 collection apparell, tents, shoes, backpacks 2020 latest W18 除鞋子外禁用，鞋子最迟 2020 禁用
13. Phthalates 塑化剂									
see Appendix P 见附录 P	See Appendix	1 (each) 1 （每个）	Best current testing technology 最佳现有技术	10 (each) 10（每个）	Toluene Extraction // GC_MS resp. LC/MS	usage ban / traces 50 per single substance 禁用/每单个成分痕量 50	sum: 1000 总和:1000	Toluene Extraction // GC_MS resp. LC/MS	
14. Heavy Metals 重金属									
see Appendix X 见附录 X	See Appendix	Details in Table Appendices 详细信息见附录	Digestion ICP analysis	no data yet, has to be fixed until mid 2017	Digestion ICP analysis	Details in Table Appendices X 详细信息见附录 X	Details in Table Appendices X 详细信息见附录 X	Details in Table Appendices 详细信息见附录	

Group / Substances 组别/物质	CAS-Number	Input water /output (wastewater) (µg/l) 入水/出水（废水）	Testing methods 测试方法	sludge mg/kg 淤泥	Testing methods 测试方法	Finished Articles / Textiles mg/kg 成品/纺织品	Finished Articles / Shoes mg/kg 成品/鞋类	Testing methods 测试方法	Status Banned / Phased out 禁用情况/淘汰
15. Isocyanates 异氰酸酯									
see Appendix M 见附录 M	See Appendix	no data yet, has to be fixed until mid 2017 暂无数据，待 2017 年中确定	Best current testing technology 最佳现有技术	no data yet, has to be fixed until mid 2017 暂无数据，待 2017 年中确定	Best current testing technology 最佳现有技术	sum of all 1.0 总和 1.0	sum of all 1.0 总和 1.0	EN 13130-8:2001 (plastics) Extraction // Derivation//LC	
16. Volatile Organic Compounds (VOCs) 挥发性有机物									
see Appendix Y 见附录 Y	See Appendix					Details in Table Appendices Y 详细信息见附录 Y	Details in Table Appendices Y		
17. others 其他									
Cyanide 氰化物		no data yet, has to be fixed until mid 2017 暂无数据，待 2017 年中确定		no data yet, has to be fixed until mid 2017 暂无数据，待 2017 年中确定					
Formaldehyde 甲醛	50-00-0					15	300	ISO 148184-1 Leather ISO 17226-1	

Appendices 附录

	Appendix A: Alkylphenols and Alkylphenolethoxylates **附录 A 烷基酚 和烷基酚聚氧乙烯醚**	**CAS – No.**
Bluesign BSSL Requirements	Nonylphenol (NP)	several
	Octylphenol (OP)	several
	Nonylphenolethoxylate $(EO)_{3-20}$	several
	Octylphenolethoxylate $(EO)_{3-20}$	several
MRSL Requirements	4-(1,1,3,3 Tetramethylbutyl)-phenol	140-66-9
	Oxtylphenol	27193-28-8
	4-Pctylphenol	1806-26-4
	4-Nonylphenol (branched)	25154-52-3
	Nonylphenol	104-40-5
	Nonylphenol (mixed isomers)	90481-04-2
	Nonylphenol Ethoxylates NPEO (1-2) various	
	Nonylphenol Ethoxylates NPEO (3-18) various	
	Nonylphenol ethoxylated	9016-45-9,68412-54-4,127087-0, 37205-87-1,26027-38-3
	4-Nonylphenol, ethoxylated	
	Octylphenol Ethoxylates OPEO (1-2) various	
	Octylphenol Ethoxylates OPEO (3-18) various	
	4-tert-Octyplphenolethoxylate	9036-19-5,68987-90-6

	Appendix B: Arylamines 附录 B 芳香胺	CAS – No.
MRSL Requiremets	**p-Aminoazobenzene**	**60-09-3**
	o-Aminoazotoluene	**97-56-3**
	4-Aminobiphenyl	**92-67-1**
	2-Amino-4-nitrotoluene	**99-55-8**
	2-Anisidine	**90-04-0**
	Benzidine	**92-87-5**
	4-Chloroaniline	**106-47-8**
	4-Chlor-2-toluidine	**95-69-2**
	p-Cresidine	**120-71-8**
	2,4-Diaminoanisole	**615-05-4**
	4,4'-Diaminodiphenylmethane	**101-77-9**
	2,4-Diaminotoluene	**95-80-7**
	3,3'-Dichlorobenzidine	**91-94-1**
	3,3'-Dimethoxybenzidine	**119-90-4**
	3,3'-Dimethylbenzidine	**119-93-7**
	3,3'-Dimethyl-4,4'-diaminodiphenylmethane	**838-88-0**
	4,4'-Methylenebis-(2-chloraniline)	**101-14-4**
	2-Naphthylamine	**91-59-8**
	4,4'-Oxydianiline	**101-80-4**
	4,4'-Thiodianiline	**139-65-1**
	2-Toluidine	**95-53-4**
	2,4,5-Trimethylaniline	**137-17-7**
	2,4-Xylidine	**95-68-1**
	2,6-Xylidine	**87-62-7**

	Appendix C: Asbestos 附录 C 石棉	CAS – No.
Bluesign BSSL Requiremets	Actinolite	77536-66-4
	Amosite	12172-73-5
	Anthophyllite	77536-67-5
	Chrysotile	12001-29-5
	Crocidolite	12001-28-4
	Tremolite	77536-68-6

	Appendix D: Chlorinated Aromatic Hydrocarbons 附录 D 氯代芳香烃	CAS – No.
MRSL Requiremets	**Dichlorobenzenes, all isomers**	**Several**
	1,2-Dichlorobenzene	**95-50-1**
	1,3-Dichlorobenzene	**541-73-1**
	1,4-Dichlorobenzene	**106-46-7**
	Trichlorobenzenes, all isomers	**Several**
	1,2,3-Trichlorobenzene	**87-61-6**
	1,2,4-Trichlorobenzene	**120-82-1**
	1,3,5-Trichlorobenzene	**108-70-3**
	Tetrachlorobenzenes, all isomers	**Several**
	1,2,3,4-Tetrachlorobenzene	**634-66-2**
	1,2,3,5-Tetrachlorobenzene	**634-90-2**
	1,2,4,5-Tetrachlorobenzene	**95-94-3**
	Pentachlorobenzene	**608-93-5**
	Hexachlorobenzene	**118-74-1**
Bluesign BSSL Requirements	Monochlorobenzene	108-90-7
	Monochlorotoluenes, all isomers	Several
	2-Chlorotoluene	95-49-8
	3-Chlorotoluene	108-41-8
	4-Chlorotoluene	106-43-4
	Dichlorotoluenes, all isomers	Several
	2,4-Dichlorotoluene	95-73-8
	2,6-Dichlorotoluene	118-69-4
	3,4-Dichlorotoluene	95-75-0
	Trichlorotoluenes, all isomers	Several
	2,3,6-Trichlorotoluene	2077-46-5
	a,a,a-Trichlorotoluene	98-07-7
	Tetrachlorotoluenes, all isomers	Several
	a,a,a,2-Tetrachlorotoluene	2136-89-2
	a,a,a,4-Tetrachlorotoluene	5216-25-1
	Pentachlorotoluene	877-11-2

	Appendix E: Colorants with carcinogenic potential 附录 **E** 致癌染料	CAS – No.
MRSL Requirements	**Acid Red 26**	**3761-53-3**
	Basic Red 9	**569-61-9**
	Basic Violet 14	**632-99-5**
	Direct Black 38	**1937-37-7**
	Direct Blue 6	**2602-46-2**
	Direct Red 28	**573-58-0**
	Disperse Blue 1	**2475-45-8**
	Disperse Orange 11	**82-28-0**
	Disperse Yellow 3	**2832-40-8**
Bluesign BSSL Requirements	Direct Yellow 1	6472-91-9
	Pigment Yellow 34	1344-37-2
	Pigment Red 104	12656-85-8
	C.I. Solvent Yellow 1	60-09-3
	C.I. Solvent Yellow 2	60-11-7
	C.I. Solvent Yellow 3	97-56-3
	C.I. Solvent Yellow 14	842-07-9
	C.I. Basic Violet 14	8004-87-3
	C.I. Direct Brown 95	16071-86-6
	C.I. Direct Blue 15	2429-74-5
	C.I. Direct Blue 218	28407-37-6
	C.I. Acid red 114	6459-94-5
	C.I. Acid Violet 49	1694-09-3

	Appendix F: Colorants with allergenous potential 附录 F 致敏染料	CAS – No.
MRSL Requirements	C.I. Disperse Blue 1	2475-45-8
	Disperse Blue 3	**2475-46-9**
	Disperse Blue 7	**3179-90-6**
	Disperse Blue 26	**3860-63-7**
	Disperse Blue 35	**12222-75-2**
		56524-77-7
	Disperse Blue 102	**12222-97-8**
	Disperse Blue 106	**12223-01-7**
	Disperse Blue 124	**61951-51-7**
	Disperse Brown 1	**23355-64-8**
	Disperse Orange 1	**2581-69-3**
	Disperse Orange 3	**730-40-5**
	Disperse Orange 37/59/76	12223-33-5
		13301-61-6
	Disperse Red 1	**2872-52-8**
	Disperse Red 11	**2872-48-2**
	Disperse Red 17	**3179-89-3**
	Disperse Yellow 1	**119-15-3**
	Disperse Yellow 9	**6373-73-5**
	Disperse Yellow 39	**12236-29-2**
	Disperse Yellow 49	**54824-37-2**

	Appendix G: Colorants banned for other reasons 附录 G 其他被禁用染料	CAS – No.
MRSL Requirements	**Basic Blue 26**	**2580-56-5**
	Disperse Yellow 23	**6250-23-3**
	Disperse Orange 149	**85136-74-9**
Bluesign BSSL Requirements	*Basic Green 4*	*Several*
	Malachit green	10309-95-2
	Malachit green chloride	569-64-2
	Malachit green oxalate	2437-29-8
	Navy Blue	Component 1: 118685-33-9
		Component 2:
		Not allocated

	Appendix H: Dioxins and Furans 附录 H 二噁英和呋喃	CAS – No.
Bluesign BSSL Requirements	**Group 1:**	**Several**
	2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746-01-6
	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	40321-76-4
	2,3,7,8-Tetrachlorodibenzofuran	51207-31-9
	2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4
	Group 2:	**Several**
	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	39227-28-6
	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	57653-85-7
	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	19408-74-3
	1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6
	1,2,3,4,7,8-Hexachlorodibenzofuran	70648-26-9
	1,2,3,6,7,8-Hexachlorodibenzofuran	57117-44-9
	1,2,3,7,8,9-Hexachlorodibenzofuran	72918-21-9
	2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5
	Group 3:	**Several**
	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	35822-46-9
	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin	3268-87-9
	1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4
	1,2,3,4,7,8,9-Heptachlorodibenzofuran	55673-89-7
	1,2,3,4,6,7,8,9-Octachlorodibenzofuran	39001-02-0
	Group 4:	**Several**
	2,3,7,8-Tetrabromodibenzo-p-dioxin	50585-41-6
	1,2,3,7,8-Pentabromodibenzo-p-dioxin	109333-34-8
	2,3,7,8-Tetrabromodibenzofuran	67733-57-7
	2,3,4,7,8-Pentabromodibenzofuran	131166-92-2
	Group 5:	**Several**
	1,2,3,4,7,8-Hexabromodibenzo-p-dioxin	110999-44-5
	1,2,3,6,7,8-Hexabromodibenzo-p-dioxin	110999-45-6
	1,2,3,7,8,9-Hexabromodibenzo-p-dioxin	110999-46-7
	1,2,3,7,8-Pentabromodibenzofuran	107555-93-1

	Appendix I: Flame retardants 附录 I 阻燃剂	CAS – No.
Bluesign BSSL Requirements	2,2-Bis(bromomethyl)-1,3-propanediol	3296-90-0
	Chlorinated paraffins, all chain lengths	Several
	Paraffin wax, chlorinated, C24	63449-39-8
	Paraffin, C_{10}-C_{13}, chlorinated (SCCP)	85535-84-8
	Paraffin, C_{14}-C_{17}, chlorinated (MCCP)	85535-85-9
	Paraffin, C_{18}-C_{28}, chlorinated (LCCP)	85535-86-0
	Tetrabromobisphenol A bis(2,3-dibromopropylether)	21850-44-2
	Triethylenephosphoramide (TEPA)	545-55-1
	Trimethyl phosphate	512-56-1
	Tri-o-cresyl phosphate	78-30-8
	Tris-(2-chloro-1-methylethyl)phosphate (TCPP)	13674-84-5
	Tris-[2-chloro-1-(chloromethyl)ethyl]phosphate (TDCP)	13674-87-8
	Trixylyl phosphate	25155-23-1
MRSL Requiremets	**Bis(2,3-dibromopropyl)phosphate**	**5412-25-9**
	Hexabromocyclododecan	**25637-99-4**
		3194-55-6
		134237-50-6
		134237-51-7
		134237-52-8
	Polybrominated diphenyl ethers (PBDE)	**Several**
	Tetrabromodiphenyl ether (TetraBDE)	**40088-47-9**
	Pentabromodiphenyl ether (PentaBDE)	**32534-81-9**
	Hexabromodiphenyl ether (HexaBDE)	**36483-60-0**
	Heptabromodiphenyl ether (HeptaBDE)	**68928-80-3**
	Octabromodiphenyl ether (OctaBDE)	**32536-52-0**
	Decabromodiphenyl ether (DecaBDE)	**1163-19-5**
	Tetrabromobisphenol A	**79-94-7**
	Tris(chloroethyl)phosphate	**115-96-8**
	Tris(2,3-dibromopropyl)phosphate (TRIS)	**126-72-7**
	Polybrominated biphenyls (PBBs)	59536-65-1 various
	Monobromo biphenyls (MonoBB)	-
	Dobromo biphenyls (DiBB)	-
	Tribromo biphenyls (TriBB)	-
	Tetrabromo biphenyls (TetraBB)	-

	Pentabromo biphyls (PentaBB)	-
	Hexabromo biphenyls (HexaBB)	-
	Heptabromo biphenyls (HeptaBB)	-
	Octabromo biphenyls (OctaBB)	-
	Nonabromo biphenyls (NonaBB)	-
	Decabromo biphenyls (decaBB)	13654-09-6
	Polybrominateds diphenyl ethers (PBDEs)	various
	Monobromo diphenylethers (MonoDBE)	-
	Dibromo diphenylethers (DiDBE)	-
	Trinbromo diphenylethers (TriDBE)	-
	Nonabromo diphenylethers (NonaBDE)	63936-56-1
	TEPA	5455-55-1
	Sodium tetraborate	1303-96-4,1303-43-4,12179-04-3,215-540-4
	Boron trioxide	1303-86-2
	Boric acid	10043-35-3,11113-50-1
	Antimony trioxide	1309-64-4
	Tri-o-cresyl phosphate	78-30-8
	Tris(1,3-dichloro-2-propyl)phosphate (TDCPP)	13674-87-8

	Appendix J: Fluorinated Greenhouse Gases 附录 J 含氟温室气体	CAS – No.
Bluesign BSSL Requirements	Sulphur hexafluoride – SF6	2551-62-4
	Perfluoromethane	75-73-0
	Perfluoroethane	76-16-4
	Perfluoropropane	76-19-7
	Perfluorobutane	355-25-9
	Perfluoropentane	678-26-2
	Perfluorohexane	355-42-0
	Perfluorocyclobutane	115-25-3
	HFC-23	75-46-7
	HFC-32	75-10-5
	HFC-41	593-53-3
	HFC-43-10mee	138495-42-8
	HFC-125	354-33-6
	HFC-134	359-35-3
	HFC-134a	811-97-2
	HFC-152a	75-37-6
	HFC-143	430-66-0
	HFC-143a	420-46-2
	HFC-227ea	431-89-0
	HFC-236cb	677-56-5
	HFC-236ea	431-63-0
	HFC-236fa	690-39-1
	HFC-245ca	679-86-7
	HFC-245fa	460-73-1
	HFC-365mfc	406-58-6

	Appendix K: Halogenated Biphenyls, Terphenyls, Napthalenes 附录 K 卤代二联苯、卤代三联苯、卤代萘	CAS – No.
Bluesign BSSL Requirements	Polybrominated biphenyls (PBBs)	Several
	Polychlorinated biphenyls (PCBs)	Several
	Polychlorinated terphenyls (PCTs)	Several
	Polybrominated terphenyls (PBTs)	Several
	Polychlorinated naphthalenes (PCNs)	Several
	Polybrominated naphthalenes (PBNs)	Several

	Appendix L: Halogenated Diarylalkanes 附录 L 卤代二芳基烷烃	CAS – No.
BSSL Requirements	Monomethyl-dibromo-diphenyl methane	99688-47-8
	Monomethyl-dichloro-diphenyl methane	81161-70-8
	Monomethyl-tetrachloro-diphenyl methane	76253-60-6

	Appendix M: Isocyanates 附录 M 异氰酸酯	CAS – No.
MRSL Requirements	**Diphenylmethane-4,4-diisocyanate (MDI)**	**101-68-8**
	Hexamethylene diisocyanate (HMDI)	**822-06-0**
	Isophorone diisocyanate (IPDI)	**4098-71-9**
	Tetramethylxylene diisocyanate (TMXDI)	**2778-42-9**
	Toluene-2,4-diisocyanate (2,4-TDI)	**584-84-9**
	Toluene-2,6-diisocyanate (2,6-TDI)	**91-08-7**

	Appendix N: Ozone Depleting Substances 附录 N 消耗臭氧层物质	CAS – No.
	Ozone-depleting substances (CFC's) class I **臭氧层消耗物质（CFC's）I 类**	**Several**
Bluesign BSSL Requirements	Trichlorofluoromethane CFC-11	75-69-4
	Dichlorofluoromethane CFC-12	75-71-8
	1,1,2-Trichloro-1,2,2-trifluoroethane CFC-113	76-13-1
	1,1,1-Trichloro-2,2,2-trifluoroethane CFC-113a	354-58-5
	1,2-Dichloro-1,1,2,2-tetrafluoroethane CFC-114	76-14-2
	1,1-Dichloro-1,2,2,2-tetrafluoroethane CFC-114a	374-07-2
	Monochloropentafluoroethane CFC-115	76-15-3
	Bromochlorodifluoromethane Halon-1211	353-59-3
	Bromotrifluoromethane Halon-1301	75-63-8
	Dibromotetrafluoroethane Halon-2402	124-73-2
	Chlorotrifluoromethane CFC-13	75-72-9
	Pentachlorofluoroethane CFC-111	354-56-3
	1,1,2,2-Tetrachloro-1,2-difluoroethane CFC-112	76-12-0
	1,1,1,2-Tetrachlorodifluoroethane CFC-112a	76-11-9
	Heptachlorofluoropropane CFC-211	422-78-6
	Hexachlorodifluoropropane CFC-212	3182-26-1
	Pentachlorotrifluoropropane CFC-213	05.06.2354
	Tetrachlorotetrafluoropropane CFC-214	29255-31-0
	1,1,3-Trichloropentafluoropropane CFC-215	76-17-5
	1,2,3-Trichloropentafluoropropane CFC-215	1652-81-9
	1,1,1-Trichloropentafluoropropane CFC-215	4259-43-2
	1,2,2-Trichloropentafluoropropane CFC-215	1599-41-3
	Dichlorohexafluoropropane CFC-216	661-97-2
	Monochloroheptafluoropropane CFC-217	422-86-6
	Carbon tetrachloride CCl4	56-23-5
	1,1,1-Trichloroethane (Methylchloroform)	71-55-6
	Methylbromide (CH3Br)	74-83-9
	CHFBr2	1868-53-7
	CHF2Br	1511-62-2
	CH2FBr	373-52-4
	C2HFBr4	353-93-5
	C2HF2Br3	353-97-9
	C2HF3Br2	354-04-1
	C2HF4Br	354-07-4
	C2H2FBr3	172912-75-3

	C2H2F2Br2	75-82-1
	C2H2F3Br	421-06-7
	C2H3FBr2	358-97-4
	C2H3F2Br	359-07-9
	C2H4FBr	762-49-2
	C3HFBr6	-
	C3HF2Br5	-
	C3HF3Br4	-
	C3HF4Br3	666-48-8
	C3HF5Br2	431-78-7
	C3HF6Br	2252-79-1
	C3H2FBr5	-
	C3H2F2Br4	148875-98-3
	C3H2F3Br3	431-48-1
	C3H2F4Br2	460-86-6
	C3H2F5Br	460-88-8
	C3H3FBr4	-
	C3H3F2Br3	666-25-1
	C3H3F3Br2	460-60-6
	C3H3F4Br	460-67-3
	C3H4FBr3	75372-14-4
	C3H4F2Br2	51584-25-9
	C3H4F3Br	460-32-2
	C3H5FBr2	453-00-9
	C3H5F2Br	461-49-4
	C3H6FBr	1871-72-3
	Chlorobromomethane CH2BrCl	74-97-5
	Ozone-depleting substances (CFC's) class II **臭氧层消耗物质（CFC's）II 类**	**Several**
	Dichlorofluoromethane HCFC-21	75-43-4
	Monochlorodifluoromethane HCFC-22	75-45-6
	Monochlorofluoromethane HCFC-31	593-70-4
	Tetrachlorofluoroethane HCFC-121	354-14-3
	Trichlorodifluoroethane HCFC-122	354-21-2
	Dichlorotrifluoroethane HCFC-123	306-83-2
	Monochlorotetrafluoroethane HCFC-124	2837-89-0
	Trichlorofluoroethane HCFC-131	359-28-4
	Dichlorodifluoroethane HCFC-132	1649-08-7
	Monochlorotrifluoroethane HCFC-133a	75-88-7
	HCFC-141	-

	Dichlorofluoroethane HCFC-141b	1717-00-6
	HCFC-142	
	Monochlorodifluoroethane HCFC-142b	75-68-3
	HCFC-151	-
	Hexachlorofluoropropane HCFC-221	422-26-4
	Pentachlorodifluoropropane HCFC-222	422-49-1
	Tetrachlorotrifluoropropane HCFC-223	422-52-6
	Trichlorotetrafluoropropane HCFC-224	422-54-8
	HCFC-225	-
	Dichloropentafluoropropane HCFC-225ca	422-56-0
	Dichloropentafluoropropane HCFC-225cb	507-55-1
	Monochlorohexafluoropropane HCFC-226	431-87-8
	Pentachlorofluoropropane HCFC-231	421-94-3
	Tetrachlorodifluoropropane HCFC-232	460-89-9
	Trichlorotrifluoropropane HCFC-233	7125-84-0
	Dichlorotetrafluoropropane HCFC-234	425-94-5
	Monochloropentafluoropropane HCFC-235	460-92-4
	Tetrachlorofluoropropane HCFC-241	666-27-3
	Trichlorodifluoropropane HCFC-242	460-63-9
	Dichlorotrifluoropropane HCFC-243	460-69-5
	Monochlorotetrafluoropropane HCFC-244	134190-50-4
	Monochlorotetrafluoropropane HCFC-251	421-41-0
	Dichlorodifluoropropane HCFC-252	819-00-1
	Monochlorotrifluoropropane HCFC-253	460-35-5
	Dichlorofluoropropane HCFC-261	420-97-3
	Monochlorodifluoropropane HCFC-262	421-02-3
	Monochlorofluoropropane HCFC-271	430-55-7

	Appendix O: Pesticides 附录 O 杀虫剂	CAS – No.
Bluesign BSSL Requirements	Aldrine	309-00-2
	Azinphos methyl	86-50-0
	Azinphos ethyl	2642-71-9
	Bromophos-ethyl	4824-78-6
	Captafol	01.06.2425
	Carbaryl	63-25-2
	Chlordane	57-74-9
	Chlordecone	143-50-0
	Chlordimeform	6164-98-3
	Chlorfenvinphos	470-90-6
	Coumaphos	56-72-4
	Cyfluthrin	68359-37-5
	Cyhalothrin, λ-	91465-08-6
	Cypermethrin	52315-07-8
	Deltamethrin	52918-63-5
	Diazinon	333-41-5
	o,p'-Dichlorodiphenyldichloroethane (o,p'-DDD)	53-19-0
	p,p'-Dichlorodiphenyldichloroethane (p,p'-DDD)	72-54-8
	o,p'-Dichlorodiphenyldichloroethylene (o,p'-DDE)	3424-82-6
	p,p'-Dichlorodiphenyldichloroethylene (p,p'-DDE)	72-55-9
	o,p'-Dichlorodiphenyltrichloroethane (o,p'-DDT) and its isomers; preparations containing DDT and its isomers	789-02-6
	p,p'-Dichlorodiphenyltrichloroethane (p,p'-DDT) and its isomers; preparations containing DDT and its isomers	50-29-3
	2,4-Dichlorophenoxyacetic acid, its salts and compounds	94-75-7
	Dichlorprop	120-36-2
	Dicrotophos	141-66-2
	Dieldrine	60-57-1
	Dimethoate	60-51-5
	Dinoseb and salts	88-85-7
	Endosulfan, α-	959-98-8
	Endosulfan, β-	33213-65-9
	Endrine	72-20-8
	Esfenvalerate	66230-04-4
	Fenvalerate	51630-58-1
	Heptachlor	76-44-8
	Heptachlor epoxide	1024-57-3
	Hexachlorocyclohexane (HCH), all isomers	608-73-1
	Isodrin	465-73-6

	Kelevane	4234-79-1
	Lindane	58-89-9
	Malathion	121-75-5
	MCPA	94-74-6
	MCPB	94-81-5
	Mecoprop	93-65-2
	Methamidophos	10265-92-6
	Methoxychlor	72-43-5
	Methyl parathion	298-00-0
	Mevinophos	7786-34-7
	Mirex	2385-85-5
	Monocrotophos	6923-22-4
	Ethyl parathion	56-38-2
	Perthane	72-56-0
	Profenophos	41198-08-7
	Propetamphos	31218-83-4
	Quinalphos	13593-03-8
	Strobane	8001-50-1
	Telodrin	297-78-9
	Toxaphene	8001-35-2
	Tribufos (DEF)	78-48-8
	2,4,5-Trichlorophenoxyacetic acid, salts and compounds	93-76-5
	Trifluralin	1582-09-8

	Appendix P: Plasticizer 附录 P 增塑剂	CAS – No.
MRSL Requiremets	**Bis-(2-methoxyethyl) phthalate (DMEP)**	**117-82-8**
	Butylbenzyl phthalate (BBP)	**85-68-7**
	Dibutyl phthalate (DBP)	**84-74-2**
	Diethylhexyl phthalate (DEHP)	**117-81-7**
	Diisobutyl phthalate (DIBP)	**84-69-5**
	Diisodecyl phthalate (DIDP)	**26761-40-0**
		68515-49-1
	Diisononyl phthalate (DINP)	**28553-12-0**
		68515-48-0
	Di-iso-pentyl phthalate (DIPP)	**605-50-5**
	Di-n-hexyl phthalate (DNHP)	**84-75-3**
	Di-n-octyl phthalate (DNOP)	**117-84-0**
	Di-n-pentyl phthalate (DnPP)	**131-18-0**
	n-Pentyl-isopentyl phthalate	**776297-69-9**
	1,2-Benzenedicarboxylic acid, di-C_{6-8}-branched alkyl esters, C_7-rich (DIHP)	**71888-89-6**
	1,2-Benzenedicarboxylic acid, di-C_{7-11}-branched and linear alkyl esters (DHNUP)	**68515-42-4**
Bluesign BSSL Requirements	Di-cyclohexyl phthalate (DCHP)	84-61-7
	Diethyl phthalate (DEP)	84-66-2
	Di-isooctyl phthalate (DIOP)	27554-26-3
	Dimethyl phthalate (DMP)	131-11-3
	Dinonyl phthalate (DNP)	84-76-4
	Di-n-propyl phthalate (DPRP)	131-16-8
	1,2-Benzenedicarboxylic acid, dipentyl ester, branched and linear	84777-06-0
	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4

	Appendix Q: Polyaromatic Hydrocarbons (PAHs) 附录 Q 多环芳烃	CAS – No.
Bluesign BSSL Requirements	Acenaphtylene	208-96-8
	Acenaphthene	83-32-9
	Anthracene	120-12-7
	Benzo(a)anthracene*	56-55-3
	Benzo(b)fluoranthene*	205-99-2
	Benzo(j)fluoranthene*	205-82-3
	Benzo(k)fluoranthene*	207-08-9
	Benzo(ghi)perylene	191-24-2
	Benzo(a)pyrene	50-32-8
	Benzo(e)pyrene*	192-97-2
	Chrysene*	218-01-9
	Dibenzo(a,h)anthracene*	53-70-3
	Fluoranthene	206-44-0
	Fluorene	86-73-7
	Indeno(1,2,3-cd)pyrene	193-39-5
	Naphthalene	91-20-3
	Phenanthrene	85-01-8
	Pyrene	129-00-0

	Appendix R: Chlorinated Solvents 附录 R：含氯溶剂	CAS – No.
Bluesign BSSL Requirements	Dichloromethane	75-09-2
	Chloroform	67-66-3
	Tetrachlormethane	56-23-5
	1,1,2-Trichloroethane	79-00-5
	1,1-Dichloroethane	75-34-3
	1,2-Dichloroethane	107-06-2
	Trichloroethylene	79-01-6
	Perchloroethane	127-18-4
	1,1,1-Trichloroethane	71-55-6
	1,1,1,2-Tetrachloroethane	630-20-6
	1,1,2,2-Tetrachloroethane	79-34-5
	Pentachlorbenzene	76-01-7
	1,1-Dichloroethylene	75-35-4

	Appendix S: Chlorophenols 附录 S：氯代苯酚	CAS – No.
MRSL Requiremets	Pentachlorophenols (PCP)	87-86-5
	Tetrachlorophenol (TeCP)	25167-83-3
	2,3,4,5-Tetrachlorophenol	4901-51-3
	2,3,4,6-Tetrachlorophenol	58-90-2
	2,3,5,6-Tetrachlorophenol	935-95-5
	Trichlorophenol (TriCP)	25167-82-2
	2,4,6-Trichlorophenol	88-06-2
	2,3,4-Trichlorophenol	15950-66-0
	2,3,5-Trichlorophenol	933-78-8
	2,3,6-Trichlorophenol	933-75-5
	2,4,5-Trichlorophenol	95-95-4
	3,4,5-Trichlorophenol	609-19-8
	Dichlorophenols (DiCP)	25167-81-1
	2,3-Dichlorophenol	576-24-9
	2,4-Dichlorophenol	120-83-2
	2,5-Dichlorophenol	583-78-8
	3,4-Dichlorophenol	95-77-2
	3,5-Dichlorophenol	591-35-5
	Mono Chlorophenol	various

	Appendix T: Solvents 附录 T：溶剂	CAS – No.	Finished Articles / Textiles mg/kg 成品/纺织品	Finished Articles / Shoes mg/kg 成品/鞋子
MRSL Requiremets	Benzene	71-43-2	Usage ban	Usage ban
	1,2 Dichloroethane	107-06-2		
	Dichloromethane	75-09-2		
	N,N-Dimethylacetamide (DMAc)	127-19-5		
	N,N-Dimethylformamide (DMF)	68-12-2	Usage ban 50 for solvent coated articles	Usage ban 50 for solvent coated articles
	N-Ethyl-2-pyrrolidone (NEP)	2687-91-4	10	100
	N-Methylpyrrolidone (NMP)	872-50-4	10	100
	Tetrachloroethylene (Perchloroethylene)	127-18-4	usage ban	usage ban
	Toluene	108-88-3	10	50
	Trichloroethylene	79-01-6	usage ban	usage ban
	Xylene, all isomers	1330-20-7	usage bam	usage ban

	Appendix U: Organotin Compounds 附录 U：有机锡	CAS – No.
MRSL Requiremets	MBT	1118-46-3
	DBT	1002-53-5
	TBT	56573-85-4
	TPHT	892-20-6
	DOT	94410-05-6
	MOT	15231-44-4
	DphT	1011-95-6
	TeBT	1461-25-2
	TCyT	-
	TPT	-
	TeET	597-64-8
	TBTO	56-35-9
	DBTC	683-18-1
	TPT	668-34-8
	DBB	75113-37-0

	Appendix V: Polycyclic Aromatic Hydrocarbons (PAHs) 附录 V：多环芳烃	CAS – No.
MRSL Requiremets	Benzo- [a]-pyrene (BaP)	50-32-8
	Benzo- [e]-pyrene (BeP)	192-97-2
	Benzo- [a]-anthracene (BaA)	56-55-3
	Chrysene (CHR)	218-01-9
	Benzo- [b]-fluoranthene (BbFA)	205-99-2
	Benzo- [j]-fluoranthene (BjFA)	205-82-3
	Benzo- [k]-fluoranthene (BkFA)	207-08-9
	Dibenzo-[a,h]-anthracene (DBAhA)	53-70-3

	Appendix W: Perfluorinated and Polyfluorinated Chemicals (PFCs) 附录 W：含氟化合物	CAS – No.
MRSL Requirements	PFOA	335-67-1
	PFNA	375-95-1
	PFBS	375-73-5 or 59933-66-3
	PFOS	1763-23-1
	4:2 FTOH	2043-47-2
	6:2 FTOH	647-42-7
	8:2 FTOH	678-39-7
	10:2 FTOH	865-86-1
	POSF	307-35-7
	PFHxS	355-46-4
	PFHxA	307-24-4
	PFOSA	754-91-6
	PFHpA	375-85-9
	PFDA	335-76-2
	PFUnA	2058-94-8
	PFDoA	307-55-1
	PFTrA	72629-94-8
	PfteA	376-06-7
	PFHpS	375-92-8
	PFDS	335-77-3
	6:2 FTA	17527-29-6
	8:2 FTA	27905-45-9
	10:2 FTA	17741-60-5
	PF-3,7-DMOA	172155-07-6
	HPFHpA	1546-95-8
	4HPFHUnA	34598-33-9
	1H, 1H, 2H, 2H-PFOS	27619-97-2

	Appendix X: Heavy Metals 附录 X：重金属	CAS – No.	Input water /output (wastewater) (µg/l) 进水/出水（废水）	Finished Articles / Textiles mg/kg 成品/纺织品	Finished Articles / Shoes mg/kg 成品/鞋子	Testing methods 测试方法
MRSL Requiremets	Total Cadmium (Cd)	7740-43-9	0.1	0.2 (extractable)	0.2 (extractable)	Extraction DIN EN ISO 105-E04:2009 // ICP
	Total Lead (Pb)	7439-92-1	1	40 (total)	100 (total)	Total digestion // ICP
	Total Mercury (Hg)	7439-97-6	0.05	0.02 (extractable)	0.02 (extractable)	Extraction DIN EN ISO 105-E04:2009 // ICP
	Total Nickel (Ni)	7440-02-0	1	90 (total)	90 (total)	
	Total Chrom VI (Cr-VI)	18540-29-9	1	0.5 leather: 3	0.5 leather: 3	
	Total Arsenic (As)	7440-38-2	1	0.2 (extractable)	0.2 (extractable)	
	Total Chrom (Cr)	7440-47-3	1	3 (extractable)	3 (extractable)	
	Total Antimony (Sb)	7440-36-0	1	5 (extractable)	5 (extractable)	

	Appendix Y: Volatile Organic Compounds (VOCs) 附录 Y：挥发性有机物	CAS – No.	Finished Articles / Textiles mg/kg 成品/纺织品	Finished Articles / Shoes mg/kg 成品/鞋子
MRSL Requiremets	Xylene	-	50	500
	o-cresol	-	10	
	p-cresol	-	10	
	m-cresol	-	10	

Manufacturing Restricted Substance List
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Usage Ranges 适用范围

Usage ranges classify consumer goods according to their consumer safety relevance.

Exposure scenarios concerning oral, dermal and inhalative exposure are the guiding principle for definition of limit values as consumer safety limits and basis for setting usage ranges. Dermal exposure (exposure to human skin) serves as the main allocation principle. Other exposure routes override this allocation if the need for a more stringent classification results from the respective usage situation.

Three usage ranges (A, B, C) are defined with A being the most stringent category concerning limit values/bans:

- Usage Range A: Next to skin use and baby-safe (0 to 3 years)
- Usage Range B: Occasional skin contact
- Usage Range C: No skin contact

This means a garment is at least usage range B if not wearing properties and expected consumer behavior require a classification in usage range A.

The following table lists common consumer goods and allocates usage ranges. This classification is typically valid for the complete product. Exceptions are defined in the list.

消费品适用范围的划分依据是消费者的安全。

对消费者安全的限值要依据口服、皮肤接触和吸入等不同接触形式来确定。是否与皮肤接触为区分适用范围的主要原则。若有其他更加严格的分类准则，则以新准则为原则进行分类。

依据纺织物中所含的禁用物质数量和限值，产品被封为三类：A，B，C。A 类为限值最严格的类别。

- A：直接接触皮肤和婴儿（0-3 岁）
- B：偶尔和皮肤接触
- C：不直接接触皮肤

服装在任何情况下都至少属于 B 范围，也可依据消费者使用行为划分入类别 A

后续的表格列出了常见消费品及其分类。此分类适用于完整产品。特殊情况在列表中有注明。

Consumer goods 消费品	Usage range A	Usage range B	Usage range C	
Automotive 汽车			x	Seat fabric - usage range B 座椅面料 B 类
Baby wear and textile articles (0 – 3 years)婴儿用纺织品 0-3 岁	x			
Backpack 背包			x	Shoulder straps, harness and backrest that have contact with the skin must be usage range A 肩带安全带和背部等与皮肤有接触的地方为 A 类
Bed linen 床上用品	x			
Bike shorts 自行车短裤	x			
Blouse 女式衬衫		x		
Bra 胸罩	x			
Carpet 地毯		x		
Cleaning cloth 抹布		x		
Curtain 窗帘			x	
Dress 衣服		x		
Furnishing fabric 装饰布		x		e.g. Seat cover 示例：椅套
Geo textiles 工程用纺织品			x	e.g. Building-/construction textiles, erosion protective textiles 示例建筑用纺织品、防腐蚀用纺织品
Gloves/Mittens 手套	x			
Harness 安全装备		x		
Headdress 头饰	x			
Jacket 夹克		x		
Leggings 绑腿	x			
Long sleeve t-shirt 长袖 T 恤	x			
Mosquito net 防蚊网			x	
Pants 裤子		x		
Pullover 套头衫		x		
Ropes & slings 绳子和吊索		x	x	Depends on use 根据用途分类
Scarf 围巾	x			
Shirt 衬衫		x		
Skirt 裙子		x		
Sleeping bag 睡袋		x		Lining must be must be usage range A 里衬必须是 A 类
Sleeping mattress 睡垫	x			
Socks 袜子	x			
Sport shirt 运动服	x			
Sweatshirt 汗衫		x		
Swim wear 泳衣	x			
Tent 帐篷			x	Tent floor must be usage range B 地席为 B 类
Tie 领带		x		
Tights 紧身衣	x			
Towel 毛巾		x		
T-ShirtT 恤	x			
Underpants (long/short)内裤（长/短）	x			
Undershirt 内衣	x			

Manufacturing Restricted Substance List
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Recommendations for testing 测试建议

Test Item 测试项目	Textiles from natural 天然织物	Textiles from synthetic fibres人造纤维织物	Additional testing for coated or printed textiles针对有涂层织物的	Leather 皮革	Plastics and other synthetic materials (PU, PVC, Rubber, TPU, TPR, EVA, etc.) 塑料及其他人造材料	Metal parts 金属
pH Value酸碱度	●	●		●	–	–
Odor气味	●	●		●	●	–
Color Fastness Properties色牢度						
Fastness to perspiration汗渍色牢度	●	●		●	–	–
Color fastness to saliva and perspiration (baby, mouthing)唾液及汗渍色牢度（婴儿、与口有接触）	●	●		●	●	–
Extractable Heavy Metals可萃取重金属						
Antimony 锑	–	PES 涤纶●		○	○	–
Arsenic砷	○	–		○	○	–
Cadmium镉	–	○	●	–	●	○
Chromium, total总铬	Wool 羊毛● / Other其他 ○	PA 尼龙● / Other 其他○		–	○	–
Chromium VI六价铬	○	○		●	○	–
Cobalt钴	○	○		○	○	–
Copper铜	○	○		○	○	–
Lead铅	●	●		●	●	○
Mercury汞	○	○		○	○	–
Nickel镍	○	○		○	○	–
Heavy Metals 重金属						
(total digestion)可消解总量						
Total Lead总铅	●	●		●	●	●
Total Cadmium总镉	●	●		●	●	●
Heavy Metals 重金属						
(release)可析出						
Nickel镍	–	–		–	–	●
Aldehydes醛类						
Formaldehyde甲醛	●	●		●	–	–
Alkylphenols and Alkylphenolethoxylates烷基酚和乙氧基烷基酚	●	●		●	○	–
Arylamines 芳香胺	●	●		●	–	–
Chlorinated Aromatic Hydrocarbons氯代芳香烃	–	●		○	–	–
Chlorinated Phenols氯代苯酚	●	●		●	–	–

Test Item 测试项目	Textiles from natural 天然织物	Textiles from synthetic fibres人造纤维织物	Additional testing for coated or printed textiles针对有涂层织物的	Leather 皮革	Plastics and other synthetic materials (PU, PVC, Rubber, TPU, TPR, EVA, etc.) 塑料及其他人造材料	Metal parts 金属
Colorants染料						
with carcinogenic potential致癌染料	●	●		●	–	–
with allergenous potential致敏染料	○	●		○	–	–
banned for other reasons其他被禁用染料	●	●		●	–	–
Flame Retardants阻燃剂 (Required if sample declared with functional finishing)只有产品声明有此功能性涂层才需测试	○	○		–	○	–
Fluorinated Substances 含氟物质						
Perfluorooctane sulfonic acid / Perfluorooctane sulfonate (PFOS)全氟辛烷磺酸及其盐 (Required if sample declared with stain/water repellent finishing)产品有防污防泼水处	○	○		○	–	–
Perfluorocarboxylic acids and salts [PFHxA, PFOA]全氟羧酸及其盐 (Required if sample declared with stain/water repellent finishing)产品有防污防泼水处	○	○		○	–	–
Glycols醇类	–	–		–	–	–
Halogenated Biphenyls, Terphenyls and Naphthalenes卤代二联苯、卤代三联苯、卤代萘	○	○		○	○	–
Halogenated Diarylalkanes卤代二芳基烷	○	○		–	○	–
Isocyanates 异氰酸酯 (Required for PU and for relevant functional finishes)有PU涂层或其他相关功能后处	○	○	PU 聚氨酯●	–	PU 聚氨酯●	–
Monomers单体						
Acrylamide丙烯酰胺	○	○		–	○	–

Test Item 测试项目	Textiles from natural 天然织物	Textiles from synthetic fibres人造纤维织物	Additional testing for coated or printed textiles针对有涂层织物的	Leather 皮革	Plastics and other synthetic materials (PU, PVC, Rubber, TPU, TPR, EVA, etc.) 塑料及其他人造材料	Metal parts 金属
Other Chemical Substances 其他化学品						
Bisphenol A双酚A	○	○		–	●	–
Cresol, all isomers甲酚及其所有异构体	○	○		○	–	–
Dimethylfumarate (Material with direct skin contact; required if the product is packaged with any form of anti-mold agent)富马酸二甲酯（产品与皮肤有直接接触，包装中	○	○		○	○	–
o-Phenylphenol邻苯基苯酚	○	○		●	–	–
2-Phenyl-2-propanol2-苯异丙醇	–	–		–	EVA ●	–
Pesticides杀虫剂	○	–		○	–	–
Plasticizers增塑剂	–	–	●	–	●	–
Polyaromatic Hydrocarbons (PAHs) incl. Benzo(a)pyrene	–	–	●	–	●	–
Polymers 聚合物						
Polyvinylchloride (PVC)聚氯乙烯	–	–	●	–	●	–
Solvents溶剂						
Benzene苯	–	–		–	–	–
1,2-Dichloroethane1,2-二氯乙烷	–	–		–	–	–
Dichloromethane二氯甲烷	–	–		–	–	–
N,N-Dimethylacetamide [DMAc] N,N-二甲基乙酰胺	–	○	○	○ 1	○	–
N,N-Dimethylformamide [DMF] N,N-二甲基甲酰胺	–	–	●	●1	○	–
N-Ethyl-2-pyrrolidone [NEP] N-乙基-2-吡咯烷酮	○	○		○	○	–
N-Methylpyrrolidone [NMP] N-甲基吡咯烷酮	○	○		○	○	–
Tetrachloroethylene四氯乙烯	○	○		○	○	–
Toluene甲苯	–	–	●	●1	●	–
Trichloroethylene三氯乙烯	○	○		●	○	–
Xylene, all isomers二甲苯及其所有异构体	–	–		–	–	–
Tin Organic Compounds有机锡化合物	○	○	●	●1	●	–

CAS-numbers, test methods, complete chemicals list: see MRSL/ Appendices
CAS 号，测试方法，完整的化学品列表见 MRSL/附录

● Testing strongly recommended 强烈建议测试

○ Testing recommended 建议测试

– Substances or group of substances with high probability not relevant 很可能无关

1 Only if finishing of leather includes coating with solvents 仅限于溶剂型涂层处理后的皮革