

Annex 4 / 附录 4

Limit values and fastness, part 1 / 限量值和色牢度, 第一部分

(The testing procedures are described in a separate document / 测试方法描述于其他文件)

Product Class / 产品级别	I Baby / 婴幼儿	II in direct contact with skin / 直接接触皮肤	III with no direct contact with skin / 非直接接触皮肤	IV Decoration material / 装饰 材料
pH value / 酸碱值 ¹				
	4.0 - 7.5	4.0 - 7.5	4.0 - 9.0	4.0 - 9.0
Formaldehyde, free and partially releasable / 游离的和可部分释放的甲醛 [mg/kg]				
Law 112 / 112 法	n.d. ²	< 75	< 150	< 300
Extractable (heavy) metals / 可萃取的重金属 [mg/kg]				
Sb (Antimony / 锑)	< 30.0	< 30.0	< 30.0	
As (Arsenic / 砷)	< 0.2	< 1.0	< 1.0	< 1.0
Pb (Lead / 铅)	< 0.2	< 1.0 ³	< 1.0 ³	< 1.0 ³
Cd (Cadmium / 镉)	< 0.1	< 0.1	< 0.1	< 0.1
Cr (Chromium / 铬)	< 1.0	< 2.0	< 2.0	< 2.0
Cr(VI)铬 (六价)		< 0.5		
Co (Cobalt / 钴)	< 1.0	< 4.0	< 4.0	< 4.0
Cu (Copper / 铜)	< 25.0 ⁴	< 50.0 ⁴	< 50.0 ⁴	< 50.0 ⁴
Ni (Nickel / 镍) ⁵	< 1.0 ⁶	< 4.0 ⁷	< 4.0 ⁷	< 4.0 ⁷
Hg (Mercury / 汞)	< 0.02	< 0.02	< 0.02	< 0.02
Ba (Barium / 钡)	< 1000	< 1000	< 1000	< 1000
Se (Selenium / 硒)	< 100	< 100	< 100	< 100
Heavy metals in digested sample / 被消解样品中的重金属 [mg/kg] ⁸				
Pb (Lead / 铅)	< 90.0	< 90.0 ³	< 90.0 ³	< 90.0 ³
Cd (Cadmium / 镉)	< 40.0	< 40.0 ³	< 40.0 ³	< 40.0 ³
Pesticides / 杀虫剂 [mg/kg] ^{9,10}				
Sum / 总计 ¹⁰	< 0.5	< 1.0	< 1.0	< 1.0
Glyphosate and salts / 草甘膦及其盐 [mg/kg]	u.o. ¹¹	u.o. ¹¹	u.o. ¹¹	u.o. ¹¹
Chlorinated phenols / 氯化苯酚 [mg/kg] ¹⁰				
Pentachlorophenol / 五氯苯酚 (PCP)	< 0.05	< 0.5	< 0.5	< 0.5
Tetrachlorophenols / 四氯苯酚 (TeCP), Sum / 总计	< 0.05	< 0.5	< 0.5	< 0.5
Trichlorophenols / 三氯苯酚 (TrCP), Sum / 总计	< 0.2	< 2.0	< 2.0	< 2.0
Dichlorophenols / 二氯苯酚 (DCP), Sum / 总计	< 0.5	< 3.0	< 3.0	< 3.0
Monochlorophenols / 一氯苯酚 (MCP), Sum / 总计	< 0.5	< 3.0	< 3.0	< 3.0
Phthalates / 邻苯二甲酸酯 [w-%] ¹²				
Sum / 总计 ¹⁰	< 0.1	< 0.1	< 0.1	
Sum without DINP / 不含 DINP 总和 ¹⁰				< 0.1

¹ Exceptions for products which must be treated wet during the further processing: 4.0 - 10.5; for foams: 4.0 - 9.0 / 例外情况: 后续加工必需经过湿处理的产品: 4.0-10.5; 海绵制品: 4.0-9.0

² n.d. corresponds according to „Japanese Law 112“ test method with an absorbance unit less than 0.05 resp. < 16 mg/kg / 此处不得检出 (n.d.) 是指使用「日本 112 法」中规定的吸收测试法应小于 0.05 吸收率单位, 即应少于 16mg/kg

³ No requirement for accessories made from glass / 对于用玻璃制成的辅料无此要求

⁴ No requirement for accessories and yarns made from inorganic materials, respecting the requirements regarding biological active products / 对于无机材料制成的辅料和纱线, 无生物活性产品相关要求

⁵ Including the requirement by EC-Regulation 1907/2006 / 包含了法规 EC 1907/2006 中对该项目的要求

⁶ For metallic accessories and metallized surfaces: < 0.5 mg/kg / 只适用于金属辅料及经金属处理之表面: < 0.5 mg/kg

⁷ For metallic accessories and metallized surfaces: < 1.0 mg/kg / 只适用于金属辅料及经金属处理之表面: < 1.0 mg/kg

⁸ Applicable to all non textile accessories and components as well as for spun dyed fibres and articles containing pigments / 针对所有非纺辅料和组成部分, 以及在纺丝时加入着色剂生产的有色纤维和含有涂料的产品

⁹ For natural fibres only / 仅适用于天然纤维

¹⁰ The individual substances are listed in Annex 5 / 具体物质列在附录 5 中

¹¹ u.o. = under observation; substance is tested randomly and result provided for information purposes; presently not regulated indeed / u.o.=受监测; 随机进行物质检测, 其结果仅用于参考; 目前不做限量要求

¹² For coated articles, plastisol prints, flexible foams, and accessories made from plastics / 适用于涂层产品、胶浆印花、柔软海绵和塑料材质辅料

Annex 4 / 附录 4

Limit values and fastness, part 2 / 限量值和色牢度, 第二部分

(The testing procedures are described in a separate document / 测试方法描述于其他文件)

Product Class / 产品级别	I Baby / 婴幼儿	II in direct contact with skin / 直接接触皮肤	III with no direct contact with skin / 非直接接触皮肤	IV Decoration material / 装饰 材料
Organic tin compounds / 有机锡化合物 [mg/kg]¹⁰				
TBT, TPhT	< 0.5	< 1.0	< 1.0	< 1.0
DBT, DMT, DOT, DPhT, DPT, MBT, MOT, MMT, MPhT, TeBT, TeET, TCyHT, TMT, TOT, TPT	< 1.0	< 2.0	< 2.0	< 2.0
Other chemical residues / 其他残余化学物				
OPP 邻苯基苯酚 [mg/kg] ¹⁰	< 10	< 25	< 25	< 25
Carcinogenic Arylamines / 致癌芳香胺 [mg/kg] ^{10,13,14}	< 20	< 20	< 20	< 20
Aniline / 苯胺 [mg/kg] ^{10,15}	< 20	< 50	< 50	< 50
TCEP 三(2-氯乙基)磷酸酯 [mg/kg] ¹⁰	< 10	< 10	< 10	< 10
Bisphenol A 双酚 A [w-%] ¹⁰	< 0.1	< 0.1	< 0.1	< 0.1
DMFu 富马酸二甲酯 [mg/kg] ¹⁰	< 0.1	< 0.1	< 0.1	< 0.1
Benzene / 苯 [mg/kg] ¹⁰	< 5.0	< 5.0	< 5.0	< 5.0
Phenol 苯酚 [mg/kg] ¹⁰	< 20	< 50	< 50	< 50
Quinoline / 喹啉 [mg/kg] ¹⁰	< 50	< 50	< 50	< 50
Diazene-1,2-dicarboxamide / 偶氮二甲酰胺 [w%] ¹⁰	< 0.1	< 0.1	< 0.1	< 0.1
Colorants / 染料 [mg/kg]				
Cleavable carcinogenic arylamines / 可裂解的致癌芳香胺 ^{10,14}	< 20	< 20	< 20	< 20
Cleavable Aniline / 可裂解的苯胺 ^{10,15}	< 20	< 50	< 50	< 50
Carcinogens / 致癌物 ¹⁰	< 50			
Allergens / 致敏物 ¹⁰	< 50			
Others / 其他 ¹⁰	< 50			
Navy Blue / 海军蓝 ¹⁰	not used / 不得使用			
Chlorinated benzenes and toluenes / 氯化苯和氯化甲苯 [mg/kg]¹⁰				
Sum / 总计	< 1.0	< 1.0	< 1.0	< 1.0
Polycyclic aromatic hydrocarbons (PAHs) / 多环芳烃 [mg/kg]¹⁶				
Benzo[a]pyrene / 苯并[a]芘	< 0.5	< 1.0	< 1.0	< 1.0
Benzo[e]pyrene / 苯并[e]芘	< 0.5	< 1.0	< 1.0	< 1.0
Benzo[a]anthracene / 苯并[a]蒽	< 0.5	< 1.0	< 1.0	< 1.0
Chrysene / 蒽	< 0.5	< 1.0	< 1.0	< 1.0
Benzo[b]fluoranthene / 苯并[b]荧蒽	< 0.5	< 1.0	< 1.0	< 1.0
Benzo[j]fluoranthene / 苯并[j]荧蒽	< 0.5	< 1.0	< 1.0	< 1.0
Benzo[k]fluoranthene / 苯并[k]荧蒽	< 0.5	< 1.0	< 1.0	< 1.0
Dibenzo[a,h]anthracene / 二苯并[a,h]蒽	< 0.5	< 1.0	< 1.0	< 1.0
Sum 24 PAHs / 24 种 PAHs 总和 ¹⁰	< 5.0	< 10.0	< 10.0	< 10.0

¹⁰ The individual substances are listed in Annex 5 / 具体物质列在附录 5 中¹³ For all materials containing polyurethane or other materials which may contain free carcinogenic arylamines / 适用于所有含有聚氨酯的材料或其他可能含有游离致癌芳香胺的材料¹⁴ The sum of cleavable carcinogenic arylamine and of possibly also as chemical residue present free carcinogenic (same) arylamine has to be also < 20 mg/kg / 可裂解的致癌芳香胺和可能以化学残基存在的游离致癌(相同)芳香胺的总量必须< 20 mg/kg¹⁵ The sum of cleavable aniline and of possibly also as chemical residue present free aniline has to be also < 20 mg/kg (product class I) resp. < 50 mg/kg (product classes II till IV) / 可裂解的苯胺和可能以化学残基存在的游离苯胺的总量必须< 20 mg/kg (产品级别 I) 或< 50 mg/kg (产品级别 II 至 IV)¹⁶ For all synthetic fibres, yarns, or threads and for plastic materials / 适用于所有合成纤维、纱线或股线及塑料材料

Annex 4 / 附录 4

Limit values and fastness, part 3 / 限量值和色牢度, 第三部分

(The testing procedures are described in a separate document / 测试方法描述于其他文件)

Product Class / 产品级别	I Baby / 婴幼儿	II in direct contact with skin / 直接接触皮肤	III with no direct contact with skin / 非直接接触皮肤	IV Decoration material / 装饰 材料
Biological active products / 生物活性产品	none / 没有 ¹⁷			
Flame retardant products / 阻燃产品	none / 无 (< 10 mg/kg; each / 每个; for sum SCCP + MCCP / SCCP + MCCP 总量 < 50 mg/kg) ^{17,18} Sum of all / 总量 < 50 mg/kg			
Solvent residues / 溶剂残留 [w-%] ^{10,19}				
NMP (N-甲基吡咯烷酮) ²⁰	< 0.05 < 0.10 ²¹			
DMAc (N,N-二甲基乙酰胺) ²⁰	< 0.05 < 0.10 ²¹			
DMF (N,N-二甲基甲酰胺) ²⁰	< 0.05 < 0.10 ²¹			
Formamide / 甲酰胺	< 0.02	< 0.02	< 0.02	< 0.02
Surfactant, wetting agent residues / 残余表面活性剂, 润湿剂 [mg/kg] ¹⁰				
NP, OP, HpP, PeP; Sum / 总计	< 10.0	< 10.0	< 10.0	< 10.0
NP, OP, HpP, PeP, NP(E0), OP(E0); Sum / 总计	< 100.0	< 100.0	< 100.0	< 100.0
PFCs, Per- and polyfluorinated compounds / 全氟及多氟化合物 ^{10,22}				
PFOS, PFOSA, PFOSF, N-Me-FOSA, N-Et-FOSA, N-Me-FOSE, N-Et-FOSE; Sum / 总计 [µg/m ²]	< 1.0	< 1.0	< 1.0	< 1.0
PFOA 全氟辛酸 [µg/m ²]	< 1.0	< 1.0	< 1.0	< 1.0
PFHpA [mg/kg]	< 0.05	< 0.1	< 0.1	< 0.5
PFNA [mg/kg]	< 0.05	< 0.1	< 0.1	< 0.5
PFDA [mg/kg]	< 0.05	< 0.1	< 0.1	< 0.5
PFUDA [mg/kg]	< 0.05	< 0.1	< 0.1	< 0.5
PFDOA [mg/kg]	< 0.05	< 0.1	< 0.1	< 0.5
PFTDA [mg/kg]	< 0.05	< 0.1	< 0.1	< 0.5
PFTeDA [mg/kg]	< 0.05	< 0.1	< 0.1	< 0.5
Further Perfluorinated carboxylic acids, 全氟羧酸, each; according to Annex 5 / 每种, 参考附录 5 [mg/kg]	< 0.05			
Perfluorinated sulfonic acids, 全氟磺酸, each; according to Annex 5 / 每种, 参考附录 5 [mg/kg]	< 0.05			
Partially fluorinated carboxylic / sulfonic acids, 部分氟化羧酸/部分氟化磺酸, each; according to Annex 5 / 每种, 参考附录 5 [mg/kg]	< 0.05			
Partially fluorinated linear alcohols, 部分氟化直链醇, each; according to Annex 5 / 每种, 参考附录 5 [mg/kg]	< 0.50			
Esters of fluorinated alcohols with acrylic acid, 氟化醇与丙烯酸形成的酯类, each; according to Annex 5 / 每种, 参考附录 5 [mg/kg]	< 0.50			

¹⁷ With exception of treatments accepted by OEKO-TEX® (see actual list on <http://www.oeko-tex.com>) / 除了 OEKO-TEX® 认可的处理方法外 (请参阅 <http://www.oeko-tex.com> 网站发布的实际列表)

¹⁸ Accepted flame retardant products do not contain any of the banned flame retardant substances listed in Annex 5 as active agent / 认可的阻燃产品不应含有任何附录 5 活性剂中所列禁用阻燃物质

¹⁰ The individual substances are listed in Annex 5 / 具体物质列在附录 5 中

¹⁹ For fibre, yarns, fabrics and coated articles (e.g. artificial leather) as well as foams (EVA, PVC), where solvents are used during production / 适用于在生产过程中使用溶剂的纤维、纱线、面料和涂层产品 (如人造革) 以及海绵 (EVA, PVC)

²⁰ Exception for products which must undergo further industrial production stages (heat process in wet or dry stage preferred, but also other steps are possible): maximal 3.0 % / 例外情况 : 后续加工必须经过进一步的工业化生产阶段 (湿热或干热处理, 但也可能采用其它处理步骤) : 最大 3.0 %

²¹ For materials made of acrylic (PAN), elastane (EL) / polyurethane and aramides as well as coated (PU-, PVC-, PVC-plastisol-, PVDC-, PVC-copolymer) textiles / Für Materialien aus Polyacrylnitril (PAN), Elastan (EL) / 适用于由腈纶(PAN)、氨纶(EL)/聚氨酯和芳纶制成的材料以及涂层纺织品 (PU-、PVC-、PVC-胶浆、PVDC-以及 PVC-共聚物)

²² For all materials with a water, soil or oil repellent finish or coating / 适用于所有经防水、防污或防油整理或涂层的材料

Annex 4 / 附录 4
Limit values and fastness, part 4 / 限量值和色牢度, 第四部分

(The testing procedures are described in a separate document / 测试方法描述于其他文件)

Product Class / 产品级别	I Baby / 婴幼儿	II in direct contact with skin / 直接接触皮肤	III with no direct contact with skin / 非直接接触皮肤	IV Decoration material / 装饰 材料
UV stabilizers / 紫外线稳定剂 [w-%]¹⁰				
UV 320	< 0.1	< 0.1	< 0.1	< 0.1
UV 327	< 0.1	< 0.1	< 0.1	< 0.1
UV 328	< 0.1	< 0.1	< 0.1	< 0.1
UV 350	< 0.1	< 0.1	< 0.1	< 0.1
Chlorinated paraffins / 氯化石蜡¹⁰				
Sum of SCCP and MCCP (SCCP 和 MCCP 总和) [mg/kg]	< 50	< 50	< 50	< 50
Siloxanes / 硅氧烷 [w-%]¹⁰				
Octamethylcyclotetrasiloxane (D4) 八甲基环四硅氧烷(D4)	< 0.1	< 0.1	< 0.1	< 0.1
Decamethylcyclopentasiloxane (D5) 十甲基环五硅氧烷(D5)	< 0.1	< 0.1	< 0.1	< 0.1
Dodecamethylcyclohexasiloxane (D6) 十二甲基环六硅氧烷(D6)	< 0.1	< 0.1	< 0.1	< 0.1
N-Nitrosamines; N-nitrosatable substances / 亚硝胺; 亚硝基物质 [mg/kg]¹⁰	u.o. ¹¹	u.o. ¹¹	u.o. ¹¹	u.o. ¹¹
Colour fastness (staining) / 色牢度 (沾色)				
To water / 耐水	3 - 4	3	3	3
To acidic perspiration / 耐酸性汗液	3 - 4	3 - 4	3 - 4	3 - 4
To alkaline perspiration / 耐碱性汗液	3 - 4	3 - 4	3 - 4	3 - 4
To rubbing, dry / 耐干摩擦 ^{23,24}	4	4	4	4
To saliva and perspiration / 耐唾液和汗液	fast / 牢固			
Emission of volatiles / 可挥发物释放量 [mg/m3]²⁵				
Formaldehyde / 甲醛 [50-00-0]	< 0.1	< 0.1	< 0.1	< 0.1
Toluene / 甲苯 [108-88-3]	< 0.1	< 0.1	< 0.1	< 0.1
Styrene / 苯乙烯 [100-42-5]	< 0.005	< 0.005	< 0.005	< 0.005
4-Vinylcyclohexene / 乙烯基环己烷 [100-40-3]	< 0.002	< 0.002	< 0.002	< 0.002
4-Phenylcyclohexene / 苯基环己烷 [4994-16-5]	< 0.03	< 0.03	< 0.03	< 0.03
Butadiene / 丁二烯 [106-99-0]	< 0.002	< 0.002	< 0.002	< 0.002
Vinylchloride / 氯乙烯 [75-01-4]	< 0.002	< 0.002	< 0.002	< 0.002
Aromatic hydrocarbons / 芳香烃	< 0.3	< 0.3	< 0.3	< 0.3
Organic volatiles / 有机挥发物	< 0.5	< 0.5	< 0.5	< 0.5
Organic cotton fibres and materials / 有机棉纤维和材料²⁶				
Genetically modified organisms (GMO) / 转基因生物(GMO)	not detectable / 未检出			
Determination of odours / 气味测定				
General / 总体	no abnormal odour / 无异味 ²⁷			
SNV 195 651 (Modified / 经修正) ²⁵	3	3	3	3
Banned fibres / 禁用纤维				
Asbestos / 石棉纤维	not used / 不得使用			

¹⁰ The individual substances are listed in Annex 5 / 具体物质列在附录 5 中

¹¹ u.o. = under observation; substance is tested randomly and result provided for information purposes; presently not regulated indeed / u.o.=受监测; 随机进行物质检测, 其结果仅用于参考; 目前不做限量要求

²³ No requirements for 'wash-out' - articles / 对于后续加工有“洗水处理”的产品无此项要求

²⁴ For pigment, vat or sulphurous colorants a minimum grade of colour fastness to rubbing of 3 (dry) is acceptable / 对于使用颜料、还原染料或硫化染料的产品, 可接受的耐干摩擦色牢度最小为 3 级

²⁵ For textile carpets, mattresses as well as foams and large coated articles not being used for clothing / 适用于纺织地毯、床垫、泡绵以及不用于服装的大型涂层产品

²⁶ Refer also to item 5.5. of this standard / 另请参照本标准第 5.5 项

²⁷ No odour from mould, high boiling fraction of petrol, fish, aromatic hydrocarbons or perfume / 无模具异味, 高沸点汽油裂解气味、无鱼腥味、无芳香或香精气味