



# 化学限用物质测试服务

RESTRICTED SUBSTANCES TESTING SERVICES



# 公司简介

## Company Profile

香港标准及检定中心 (STC) 成立于 1963 年, 是香港首家独立非牟利的测试、检验及认证机构。STC 提供广泛的检测及认证服务, 涵盖玩具、儿童产品、纺织品、服装、鞋、家具、电子及电气产品、医疗仪器、食品、化学品及药品。我们的实验室设备完善齐全, 能提供一站式合格评定服务。为满足全球各地对检测及认证服务的需求, STC 不仅于国内主要城市或地区 (包括广东、上海、常州) 成立分公司, 还在海外包括越南、日本、美国及德国设有测试实验室及办事处。

STC 化学、食品和药物部推出针对化学限用物质的检测服务, 公司配备先进的设备、拥有专业的团队, 确保您的产品符合相关国家技术和安全要求。

Established in 1963, Hong Kong Standards and Testing Centre (STC) is Hong Kong's first independent, not-for-profit testing, inspection and certification organisation. Through our full-featured laboratories and one-stop services, STC offers a wide range of conformity assessment services on products covering Toys, Children's Products, Textiles, Apparel, Footwear, Furniture, Electrical and Electronic Products, Medical Devices, and Food as well as Chemical and Pharmaceutical Products. To meet the global demand for testing and certification services, STC set up laboratories and offices in China's major cities (such as Guangdong, Shanghai and Changzhou) and in Vietnam, Japan, the USA and Germany.

Chemical, Food and Pharmaceutical Products Division in STC offers testing services tailored for restricted substances, with advanced equipment and professional specialists, to ensure full compliance of your products with national technical and safety requirements.





## 愿景 Vision

成为全球首屈一指，备受尊崇及认可的检测机构。

To become a leading conformity assessment service provider  
that is recognised and respected worldwide.



## STC 测试服务获以下认可

STC Testing Service is Accredited by



检验检测机构资质认定  
(CMA)



中国合格评定  
国家认可委员会  
(CNAS)



德国认可处  
(DAKKS)



香港认可处  
(HKAS - HOKLAS)



日本厚生劳动省  
(JMHLW)



日本制品安全标志体系  
(SG 标志)



美国消费品安全委员会  
(CPSC)



越南实验室认可  
(VILAS)

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# 限用物质安全涉及材料范围

## Scope of Materials Involved in the Safety of Restricted Substances

 皮革、人造皮革 Leather, artificial leather	 塑料、树脂 Plastic, resin	 金属、合金、电镀 Metals, alloys, electroplating
 胶水 Glue	 竹、木 Bamboo, wood	 颜料、涂料、油墨、印花、丝印等 Pigments, coatings, inks, printing, screen printing, etc.
 纺织品 Textiles	 橡胶、硅胶 Rubber, silicone	 陶瓷、玻璃、搪瓷 Ceramic, glass, enamel
 海绵 Sponge	 纸张、纸板 Paper, cardboard	 水晶、人造砖石等 Crystals, artificial bricks and stones, etc.

## 欧洲标准

### European Standard

出口欧洲的物品，可按照 EU 1907/2006 REACH 法规附录 17 中的限用物质要求和高度关注物质要求以及持久性有机污染物 (POPs) 法规要求进行品质管控。

Items exported to Europe may comply with the restricted substances requirements and substances of very high concern requirements in Annex 17 of the 1907/2006 REACH Regulation, as well as the Persistent Organic Pollutants (POPs) Regulation for quality control.

法规章节 Regulation Section	受限物质 Restricted Substances	法规限量 Regulation Limits	涉及材料 Applicable Materials
REACH 附录 17 的 43 条款 REACH Annex XVII Item 43	偶氮染料 Azo dyes	≤ 30ppm	纺织品、皮革、人造革、油墨 Textiles, leather, artificial leather, inks
REACH 附录 17 的 23 条款 REACH Annex XVII Item 23	镉 Cadmium (Cd)	涂层 Coatings: ≤ 1000ppm 塑料或珠宝金属部件 Plastic or jewelry metal parts: ≤ 100ppm	塑胶、颜料、涂层和电镀、油漆、金属 Plastics, pigments, coatings and plating, paints, metals
REACH 附录 17 的 47 条款 REACH Annex XVII Item 47	六价铬 Chromium VI (Cr (VI))	≤ 3ppm	皮革 Leather
REACH 附录 17 的 50 条款 REACH Annex XVII Item 50	多环芳烃 Polycyclic Aromatic Hydrocarbons (PAHs)	≤ 1ppm ≤ 0.5ppm (儿童玩具、护理用品) Children's toys and child care articles)	橡胶、塑料 Rubber, plastic

法规章节 Regulation Section	受限物质 Restricted Substances	法规限量 Regulation Limits	涉及材料 Applicable Materials
REACH 附录 17 的 61 条款 REACH Annex XVII Item 61	富马酸二甲酯 Dimethyl fumarate (DMFu)	≤ 0.1ppm	皮革、纺织品、防霉剂 Leather, textiles, mildew preventives
REACH 附录 17 的 4, 7, 8, 45 条款 REACH Annex XVII Item 4, 7, 8, 45	阻燃剂: 八溴联苯醚、三吡啶基 氧化磷、三 (2-氯乙基)、磷酸 酯、三 (2, 3-二溴丙基)、磷酸 酯、多溴联苯 Flame Retardant: Octa BDE, TEPA, TCEP, Tris, PBBs	八溴联苯醚 Octa BDE: ≤ 1000ppm 禁用: 三吡啶基氧化磷、三 (2-氯乙基) 磷酸酯、 三 (2,3-二溴丙基) 磷酸酯、多溴联苯 Prohibited: TEPA, TCEP, Tris, PBBs	纺织品、海绵、塑料 Textiles, foam, plastic
REACH 附录 17 的 72 条款 REACH Annex XVII Item 72	甲醛 Formaldehyde	直接长期接触皮肤 For products in prolonged direct skin contact: ≤ 75ppm	纺织品 Textiles
REACH 附录 17 的 63 条款 REACH Annex XVII Item 63	铅 Lead (Pb)	≤ 500ppm	油漆、油墨、颜料、染料、涂层、金 属、塑料、水晶、人造革 Paints, inks, pigments, dyes, coatings, metals, plastic, crystal, artificial leather
REACH 附录 17 的 27 条款 REACH Annex XVII Item 27	镍 Nickel (Ni)	长期接触皮肤 For products intended to come into direct and prolonged contact with the skin: 0.5µg/cm <sup>2</sup> /week 穿刺皮肤 Piercing post assemblies: 0.2µg/cm <sup>2</sup> /week	金属 Metals
REACH 附录 17 的 46 条款 REACH Annex XVII Item 46	壬基酚聚氧乙烯醚 Nonyl phenol ethoxylate (NPEO)	纺织品 Textiles NPEO: 100ppm	纺织品 Textiles
REACH 附录 17 的 20 条款 REACH Annex XVII Item 20	有机锡化合物 Organotin compounds	三取代有机锡 Tri-substituted organotin compounds: 0.1% 二丁基锡 (TBT): 0.1% 二辛基锡 (DOT): 0.1%	纺织品、皮革、塑胶、油漆 Textiles, leather, plastic, paints
REACH 附录 17 的 51 条款 REACH Annex XVII Item 51	邻苯二甲酸盐 Phthalates	塑性材料中 DEHP, DBP, BBP, DIBP 单独或 总量 ≤ 0.1% DEHP, DBP, BBP and DIBP individually or in total in the plastic materials ≤ 0.1%	橡胶 / 乳胶、塑料、涂层、油墨、 胶水、丝印、人造革 Rubber / latex, plastic, coatings, inks, glue, screen printing, artificial leather
REACH 附录 17 的 52 条款 REACH Annex XVII Item 52		可放入口中的玩具和儿童护理产品的塑性材质 中 DINP, DIDP, DNOP 单独或总量 ≤ 0.1% DINP + DIDP + DNOP in plastic materials of toys and children's care products that can be put in the mouth, either individually or in total ≤ 0.1%	
REACH 附录 17 的 68 条款 REACH Annex XVII Item 68	含 9 至 14 个碳原子的全氟羧酸 (C9-C14 PFCAs) 及其盐类和相关 物质 Perfluorinated carboxylic acid containing 9-14 carbon atoms (C9-C14 PFCAs) and their salts and related substances	C9-C14 PFCAs 及其盐类总浓度小于25ppb, 或 C9-C14 PFCAs 相关物质总浓度小于 260ppb C9-C14 PFCAs and their salts < 25ppb (total concentration), or C9-C14 PFCA-related substances < 260ppb (total concentration)	纺织品、皮革、油漆、油墨、 食品包装、消防泡沫、洗涤剂、 化妆品、易清洗面板 Textiles, leather, paints, inks, food packaging, firefighting foam, detergents, cosmetics, easy-to-clean panels
REACH 附录 17 的 79 条款 REACH Annex XVII Item 79	PFHxA 及其盐类, PFHxA 相关物质 PFHxA and its salts, PFHxA-related substances	PFHxA 及其盐类含量 PFHxA and its salts ≤ 25ppb PFHxA 相关物质单项及总和 Individual and total amounts of PFHXA-related substances ≤ 1000ppb	

# 欧洲标准

## European Standard

法规章节 Regulation Section	受限物质 Restricted Substances	法规限量 Regulation Limits	涉及材料 Applicable Materials
REACH SVHC	高度关注物质 Substance of Very High Concern	1000ppm	所有材料 All materials
POPs 法规 POPs Regulation	PFOS 及其盐类, PFOS 相关物质 PFOS and its salts, PFOS-related substances	PFOS 及其盐类含量 PFOS and its salts $\leq 25$ ppb, PFOS 相关物质单项及总和 Individual or total PFOS-related substances $\leq 1000$ ppb	纺织品、皮革、油漆、油墨、食品包装、消防泡沫、洗涤剂、化妆品、易清洗面板 Textiles, leather, paints, inks, food packaging, firefighting foam, detergents, cosmetics, easy-to-clean panels
	PFOA 及其盐类, PFOA 相关物质 PFOA and its salts, PFOA-related substances	PFOA 及其盐类含量 PFOA and its salts $\leq 25$ ppb, PFOA 相关物质单项和总和 Individual or total PFOA-related substances $\leq 1000$ ppb	
	PFHxS 及其盐类, PFHxS 相关物质 PFHxS and its salts, PFHxS-related substances	PFHxS 及其盐类含量 PFHxS and its salts $\leq 25$ ppb, PFHxS 相关物质单项和总和 Individual or total PFHxS-related substances $\leq 1000$ ppb	
POPs 法规 POPs Regulation	短链氯化石蜡 Short-chain chlorinated paraffins (SCCP)	在物质和制剂中小于 For substances and preparations $< 10000$ ppm 在物品中小于 For articles $< 1500$ ppm	橡胶、塑料、涂料 Rubber, plastics, coatings
	五氯苯 Pentachlorophenol (PCP)	5ppm	木材、纸制品、纺织品、皮革 Wood, paper products, textiles, leather
	六溴环十二烷 Hexabromocyclododecane (HBCDD)	75ppm	纺织品、塑料、涂料 Textiles, plastic, coatings
	多溴二苯醚 Polybrominated diphenyl ethers (PBDEs) - 四溴二苯醚 Tetra-PBDE - 五溴二苯醚 Penta-PBDE - 六溴二苯醚 Hexa-PBDE - 七溴二苯醚 Hepta-PBDE - 十溴二苯醚 Deca-PBDE	混合物或制品中, 几种多溴二苯醚的总和小于 The sum of certain PBDEs for mixtures or articles: $< 10$ ppm	纺织品、海绵、塑料 Textiles, foam, plastic

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## ► 欧盟 (EU) 2025/40 《包装和包装废弃物条例》 EU 2025/40 Packaging and Packaging Waste Regulation (PPWR)

本指令适用于投放欧洲共同体市场的所有包装物和所有废弃包装物，不管是工业商业、办公室、商店、服务业、家庭或其它场所使用的或废弃的，也不管使用的是什么材料。

This directive applies to all packaging materials and all waste packaging materials placed on the market of the European Community, whether used or discarded in industrial, commercial, office, store, service, household or other places, regardless of the material used.

受限物质 Restricted Substances	限量要求 Limited Requirement	涉及材料 Applicable Materials
铅 (Pb)、镉 (Cd)、汞 (Hg)、六价铬 (Cr)	铅 (Pb) + 镉 (Cd) + 汞 (Hg) + 六价铬 (Cr) < 100ppm	所有包装材料 All packaging materials
全氟烷基和多氟烷基化合物 Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS)	<ul style="list-style-type: none"> <li>- 单个 PFAS 物质的检测限值 &lt; 25ppb (不包括聚合物 PFAS 的定量) Detection limits for individual PFAS substances &lt; 25ppb (excluding the quantification of polymer PFAS)</li> <li>- 前体降解后, PFAS 的总和 &lt; 250ppb (不包括聚合物 PFAS 的定量) The total amount of PFAS after the degradation of precursors &lt; 250ppb (excluding the quantification of polymer PFAS)</li> <li>- PFASs (包括聚合物 PFAS) &lt; 50ppm (如果总氟含量超过 50mg/kg, 应提供氟含量证明) PFASs (including polymer PFAS) &lt; 50ppm (If the total fluorine content exceeds 50mg/kg, a fluorine content certificate should be provided)</li> </ul>	食品包装材料 Food contact packaging materials



## ► 欧盟 ROHS 指令 2011/65/EU & (EU) 2015/863 EU ROHS Directive 2011/65/EU & (EU) 2015/863

RoHS 指令，即《关于在电子电气设备中限制使用某些有害物质的指令》，是欧盟发布的一项重要指令文件。该指令的主要目标是使各成员国关于在电子电气设备中限制使用有害物质的法律趋于一致，从而有助于保护人类健康和报废电子电气设备合乎环境要求的回收和处理。

The RoHS Directive, namely the "Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Directive", is a legal document issued by the European Union. The main objective of this directive is to bring together the laws of member states regarding the restriction of the use of hazardous substances in electrical and electronic equipment, thereby contributing to the protection of human health and the environmentally compliant recycling and disposal of end-of-life electrical and electronic equipment.

受限物质 Restricted Substances	限量要求 Limited Requirement	高风险材料 High-risk Materials
铅 (Pb) 镉 (Cd) 汞 (Hg) 六价铬 (Cr)	铅 (Pb): 1000ppm 镉 (Cd): 100ppm 汞 (Hg): 1000ppm 六价铬 (Cr): 1000ppm	油料添加剂、包装件、塑料稳定剂及固化剂、染料、颜料、焊料、电子陶瓷、玻璃部件、电池原料等；防腐剂、催化剂、电极、塑胶制品、电镀液、防锈剂、鞣革等 Oil additives, packaging parts, plastic stabilisers and curing agents, dyes, pigments, solders, electronic ceramic, glass components, battery raw materials, etc. Preservative, catalysts, electrodes, plastic products, electroplating solutions, rust inhibitors, tanning leather, etc
多溴联苯 (PBBs) 和多溴二苯醚 (PBDEs)	1000ppm	作为阻燃剂存在塑料中 It exists in plastic as a flame retardant
邻苯二甲酸二异丁酯 (DIBP)、邻苯二甲酸二(2-乙基己基)酯 (DEHP)、邻苯二甲酸二丁酯 (DBP)、邻苯二甲酸丁苄酯 (BBP)	1000ppm	增塑剂，用于可塑性材料 (塑料、油墨等) Plasticisers, used for plastic materials (plastic, inks, etc.)

# 美国标准

## U.S. Standard

### 美国《消费品安全改进法案》

#### The Consumer Product Safety Improvement Act (CPSIA)

CPSIA 是美国《消费品安全改进法案》的习惯简称，该法案于 2008 年 8 月 14 日由总统布什正式签署为法律。该法案是自 1972 年消费品安全委员会 (CPSC) 成立以来颁布的最为严厉的消费者保护法案。CPSIA 影响着美国所有生产、进口、分销、玩具、服装和其它儿童产品及护理品的相关行业。所有相关产品必须符合该法案的规定、禁令、标准或规则。该法案还要求建立消费品安全公共数据库，以及要求某些儿童产品在被进口到美国前必须获得该委员会认可的独立第三方实验室出具的测试报告。

The Consumer Product Safety Improvement Act, shortly known as CPSIA, was signed into law on 14 August 2008 by President Bush. This Act has been the strictest consumer protective act since the establishment of Consumer Product Safety Committee (CPSC) in 1972. CPSIA has deeply influenced all industries including manufacturing, importing distributing, toy, clothing, and other children products and child care articles. All relevant products should comply with the regulations, prohibitions, standards and rules under the Act, The Act also requires setting up the consumer products safety public database. Certain children products exporting to America should provide testing reports from independent third-party laboratories accredited by CPSC.

适用范围: 12 岁或 12 岁以下儿童消费品

Scope of application: consumer products designed or intended for use by children 12 years of age and under.

法规章节 Regulation Section	项目 Item	法规限量 Regulation Limits	涉及材料 Applicable Materials
Sec.101(a)	基材中总铅含量* Total lead in substrates*	100ppm	金属、塑料、水晶、 人造革 Metal, plastic, crystal, artificial leather
Sec.101(f)	油漆及类似表面涂层中总铅含量* Lead in paint and similar surface-coating materials*	90ppm	涂料、油漆 Coatings, paints
Sec.103	可追溯性标签 Tracking labels for children's products	儿童产品的制造商应在产品及包装上提供易于识别的永久性标识 Manufacturers shall have a tracking label or other distinguishing permanent mark on any consumer product primarily intended for children twelve and younger.	-
Sec.104	耐用护理产品标准及消费品登记 Standards and consumer registration of durable nursery products	耐用护理产品生产窗为每一个产品提供消费者登记表；保留向生产商登记该产品的消费者记录；生产商永久的地址及联系信息、类型名称及型号、每个产品的生产日期。 For durable care products, the manufacturer shall provide a consumer registration form for each product; maintain consumer records of product registrations with the manufacturer; and keep on file the manufacturer's permanent address and contact information, product category, name and model number, as well as the production date of each individual product.	-
Sec.105	玩具及游戏用品广告的标注要求 Labeling requirement for advertising toys and games	当产品包装要求有警告性声明时，产品的广告包括互联网及目录上必须含有同样的警告性声明。必须用同样的语言，明显清晰的标识，与 16 CFR 1500 的要求一致。 When a warning statement is required on the product packaging, the same warning statement must be included in all product advertisements, including those on the internet and in catalogs. It shall be in the same language, marked in a clear and prominent manner, and comply with the requirements of 16 CFR 1500.	-



## ▶ ASTM F2923 《儿童珠宝首饰安全标准》 Standard Specification for Consumer Product Safety for Children's Jewelry

2011年11月，美国材料试验协会通过的ASTM F2923《儿童珠宝首饰安全标准》，是迄今为止关于儿童珠宝最为全面的安全标准。该标准不仅提供了儿童珠宝中有毒元素含量及某些机械性危害的规定及测试方法还包含了对年龄标示和年龄标签的要求及建议。

The new ASTM F2923 “Standard Specification for Consumer Product Safety for Children’s jewelry” was published on 1 November 2011, which by far is the most comprehensive safety standard for children’s jewelry. This standard provides requirements and test methods for toxic elements content and certain mechanical hazards in children’s jewelry. It also includes recommendations for age labelling and warnings.

**适用范围：**指为12岁和12岁以下儿童设计及供他们使用的珠宝首饰，其中涵盖高级珠宝首饰及时装珠宝首饰，但不包括玩具珠宝首饰。

**Scope of application:** jewelry designed or intended primarily for use by children 12 years old and under, including high-end jewelry and fashion jewelry, but not toy jewelry.

材料类别 Material Type 测试项目 Test Item	油漆或表面涂层* Paint or Surface Coating*	金属 (电镀或非电镀) Metal Components (Plated or not-Plated)	塑料 / 聚合物 Plastic / Polymeric Components	玻璃、陶瓷或水晶装饰的部件 及 CPSC 包含的其它材料 Glass, Ceramic or Crystal Decorative Components and Other Materials not Excluded by the CPSC
总含铅量 Total lead	≤ 90ppm	≤ 100ppm	≤ 100ppm	≤ 100ppm
可萃取重金属 Extractable heavy metals	锑 (Sb): ≤ 60ppm 砷 (As): ≤ 25ppm 钡 (Ba): ≤ 1000ppm 镉 (Cd): ≤ 75ppm 铬 (Cr): ≤ 60ppm 汞 (Hg): ≤ 60ppm 硒 (Se): < 500ppm	-	-	-
总含镉量 Total cadmium	-	≤ 75ppm (超标时, 要进行萃取镉的测试) (proceed extracted cadmium test when exceeded)		-
萃取镉含量 Extracted cadmium	-	≤ 200µg (小部件 Small part) ≤ 18µg (非小部件 Not a small part)	≤ 75ppm (小部件 Small part) ≤ 18µg (非小部件 Not a small part)	-
镍的迁移 Migration of nickel	-	长期接触皮肤 For products intended to come into direct and prolonged contact with the skin: 0.5µg/cm <sup>2</sup> /week  穿刺皮肤 Piercing post assemblies: 0.2µg/cm <sup>2</sup> /week	-	-
邻苯二甲酸酯含量 Phthalates content	可接触材料 For accessible materials DBP, DEHP, BBP, DINP, DIBP, DPENP, DHEXP / DnHP, DCHP ≤ 0.1%	-	可接触材料 For accessible materials DBP, DEHP, BBP, DINP, DIBP, DPENP, DHEXP / DnHP, DCHP ≤ 0.1%	-

## 注入液体的珠宝首饰 Liquid Filled Jewelry

- 儿童珠宝首饰不能含有列在 16 CFR 1500.231 上的物质，或列在 16 CFR 1500.14 的约束下需特别标签的物质，被允许放在儿童饰品中的液体必须根据《ASTM F963》进行检查，以排除潜在的危害。
- 用于儿童珠宝首饰的化妆用品，液体、糊状、泥、凝胶及粉状（美术材料除外），清洁度皆需符合要求。
- 在儿童饰品中的化妆品成份应做潜在微生物降解的评估，或根据《ASTM F963》做微生物控制及防腐效能。
- 儿童珠宝首饰中填充液体不能含有列在 16 CFR 1500.231 上或 16 CFR 1500.14 中的物质，被允许放在儿童饰品中的液体必须根据 ASTM F963 进行检查，以排除潜在的危害。
- Children's jewelry should not contain any material listed in 16 CFR 1500.231 or materials which would require special labelling under 16 CFR 1500.14. Permitted liquids in liquid filled children's jewelry should be screened to eliminate potential hazards in accordance with ASTM F963.
- The cleanliness of cosmetics, liquids, paste, gels, and powders used in children's jewelry (excluding art materials) shall meet requirements.
- The formulations of cosmetics used in children's jewelry shall be evaluated for potential microbiological degradation, or they shall be tested for microbial control and preservative effectiveness as determined in ASTM F963.
- Children's jewelry should not contain any material listed in 16 CFR 1500.231 or materials which would require special labelling under 16 CFR 1500.14. Permitted liquids in liquid filled children's jewelry should be screened to eliminate potential hazards in accordance with ASTM F963.

## 儿童珠宝物理机械性能方面的要求 Physical and Mechanical Requirements for Children's Jewelry

- 儿童珠宝在接收状态或在正常使用及滥用后均不能产生危害性的磁铁。
- 戴在脖子上的儿童项链在 15 磅拉力下能断开，并且断开后不产生磁铁、尖点和锐边部件。
- 8 岁以下的儿童珠宝使用滥用后不能有尖点和锐边。
- 3 岁以下的儿童珠宝不能含有小部件。
- 其它推荐性标签及警告语的要求。
- Children's jewelry shall not liberate hazardous magnet after use and abuse testing.
- Children's jewelry intended to be attached around the neck shall release when subject to 15 lb of tension test and free from magnet, sharp point or edge.
- Jewelry for children up to 8 years of age shall be subjected to the use and abuse testing and free from sharp point or edge.
- Small parts shall not be contained in jewelry for children up to 3 years of age.
- Other recommended label and warning statement requirements.



## ▶ ASTM F2999 《成人珠宝首饰安全标准》 Safety Standard for Adult Jewelry

2013年6月，美国材料与试验协会 (ASTM) 颁布的首部成人饰品自愿性标准 ASTM F2999 《成人珠宝首饰安全标准》。

In June 2013, the American Society for Testing and Materials (ASTM) issued the first voluntary standard for adult jewelry, ASTM F2999 Safety Standard for Adult Jewelry.

**适用范围：**本标准适用于成人珠宝首饰，意指为 12 岁以上的消费者设计或主要供其使用的珠宝首饰。标准涵盖对指定元素及某些机械性危险的要求。这却不涵盖所有危害，及性能或品质测试。

**Scope of application:** this standard is applicable to adult jewelry, meaning jewelry designed for consumers aged over 12 years or mainly for their use. The standard covers the requirements for specified elements and certain mechanical hazards. This, however, does not cover all the hazards, nor performance or quality tests.

材料类别 Material Type 测试项目 Test Item	油漆或表面涂层* Paint or Surface Coating*	电镀金属 Plated Metal Components	非电镀金属 Unplated Metal Components	塑料 / 聚合物 Plastic / Polymeric Components	其它材料 Other Materials
总含铅量 Total lead	≤ 600ppm	≤ 6.0%	≤ 1.5%	≤ 200ppm	≤ 600ppm
可萃取重金属 Extractable heavy metals	锑 (Sb): ≤ 60ppm 砷 (As): ≤ 25ppm 钡 (Ba): ≤ 1000ppm 镉 (Cd): ≤ 75ppm 铬 (Cr): ≤ 60ppm 汞 (Hg): ≤ 60ppm 硒 (Se): < 500ppm	-	-	-	-
总含镉量 Total cadmium	-	≤ 15000ppm (超标时, 要进行萃取镉的测试) (Proceed extracted cadmium test when exceeded)			-
萃取镉含量 Extracted cadmium	-	≤ 200µg (小部件 Small part) ≤ 18µg (非小部件 Not a small part)		≤ 75ppm (小部件 Small part) ≤ 18µg (非小部件 Not a small part)	-
镍的迁移 Migration of nickel	-	长期接触皮肤 For products intended to come into direct and prolonged contact with the skin: 0.5µg/cm <sup>2</sup> /week  穿刺皮肤 Piercing post assemblies: 0.2µg/cm <sup>2</sup> /week		-	-

\* 成人珠宝首饰中填充液体不能含有列在 16 CFR 1500.14 中的物质。  
Adult liquid filled jewelry should not contain materials which would require special labelling under 16 CFR 1500.14.



## ► 美国加利福尼亚州要求 U.S. California Requirements

加州 65 法案：加州 65 法案，全称 1986 年饮用水安全和有毒物质强制执行法，对加州境内的所有产品和环境进行监管。该法案要求产品中有害物质达到触发警告要求的暴露水平则需加贴警告标识，否则将面临诉讼进而产生每项违规每天不超过 2,500 美元的罚金。

California Proposition 65: California Proposition 65, officially known as the Safe Drinking Water and Toxic Enforcement Act of 1986, regulates all products and the environment within the state of California. The bill requires that if the exposure level of harmful substances in a product reaches the threshold that triggers a warning, a warning label must be affixed; otherwise, legal action will be taken and a fine of no more than \$2,500 per day will be imposed for each violation.

### 提案的核心要求 The Core Requirements of the Proposal

- 保护加州公民和饮用水源安全。
- 目前已有超过 1000 种针对致癌、致出生缺陷或其他生殖伤害的化学物质被列在加州 65 号提案化学物质表里。
- 在加州从事任何商业活动，如果产品中含有加州 65 化学物质表里管控的物质含量大于安全限值，企业都需要提供一个“清晰和合理”的警示标签，将其危害告知公民。
- Protect the safety of California citizens and drinking water sources.
- At present, more than 1,000 chemicals that cause cancer, birth defects or other reproductive harm have been listed in the California Proposition 65 chemical substances list.
- In California, for any business activities, if the content of the substances controlled in the California 65 Chemical Substance list in the product exceeds the safety limit, enterprises must provide a "clear and reasonable" warning label to inform citizens of its hazards.





## 有害物质主要包括 Harmful Substances Mainly Include

受限物质 Restricted Substances	涉及产品 Applicable Products
总铅 Total lead	- 电子电器产品 Electronic and electrical products
总镉 Total cadmium	- 玩具和儿童用品 Toys and children's products
可萃取镉 Soluble cadmium	- 食品接触材料 Food contact materials
邻苯二甲酸酯 Phthalates	- 化妆品和个人护理用品 Cosmetics and personal care products
甲醛 Formaldehyde	- 家居用品 Household goods
可萃取砷 Soluble arsenic	- 纺织品和服装 Textiles and clothing
六价铬 Chromium VI	- 鞋类 Footwear
双酚 A BPA	- 珠宝首饰 Jewelry and ornaments
全氟烷基和多氟烷基化合物 PFAS	- 汽车配件 Automobile parts
	- 万圣节产品 Halloween products
	- 玻璃、陶瓷制品 Glass and ceramic products
	- 其他含有化学成分的产品 Other products containing chemical components

## 警示标签要求 Warning Label Requirements

- 警示标签应为黄色等边三角形内含有黑色感叹号。
- 如果产品的标签未使用黄色打印，符号可以打印成黑白色。
- “警告：”一词需要用大写字母和粗体。
- The warning label should be a yellow equilateral triangle with a black exclamation mark inside.
- If the product label is not printed in yellow, the symbol can be printed in black and white.
- The word "Warning:" should be in capital letters and bold.

例如： 警告： 或  警告：  
警示标签与标签、标志上的其他字样、陈述、设计或装置相比，应突出显示。在普通条件使用或购买时，警示标签应要容易被看到和读懂。

For example:  **WARNING:** OR  **WARNING:**  
Warning labels should be prominently displayed compared with other words, statements, designs or devices on labels or signs. When used or purchased under normal conditions, warning labels should be easily visible and understandable.



## 美国伊利诺斯州公共法要求 U.S. Illinois Public Law Requirements

法规 Regulations	受限物质 Restricted Substances	限量要求 Limit Requirement	涉及材料 Applicable Materials
伊利诺伊州公共法案 097-0612 Illinois Public Act 097-0612	总铅 Total lead	涂层 Coating ≤ 40ppm	涂料、油漆 Coatings, paints
		基材 Substrates ≤ 40ppm	CPSIA 豁免的材料不需测试 No testing required for exempted materials from CPSIA
伊利诺伊州公共法案 096-1379 Illinois Public Act 096-1379	可萃取镉 Soluble cadmium	75ppm	金属 (电镀或非电镀)、塑料 / 聚合物 Metal components (plated or not-plated), plastic / polymeric components

## 美国明尼苏达州要求 U.S. Minnesota Requirements

法规 Regulations	受限物质 Restricted Substances	限量要求 Limit Requirement	涉及产品 Applicable Products
美国州法规, 明尼苏达州法典第 325E.3892 章节 US State Law, Minnesota Statutes, Chapter 325E, Section 325E.3892 (HF 2310)	总铅 Total lead	≤ 90ppm	<ul style="list-style-type: none"> <li>- 珠宝饰品 Jewelry and accessories</li> <li>- 玩具 Toys</li> <li>- 化妆品和个人护理产品 Cosmetics and personal care products</li> <li>- 拼图、棋盘游戏、纸牌游戏和类似游戏 Cosmetics and personal care products</li> <li>- 游戏设置和游戏结构 Game settings and game structure</li> <li>- 户外游戏产品 Outdoor game products</li> <li>- 学习用品 School supplies</li> <li>- 锅碗瓢盆 POTS, pans and bowls</li> <li>- 杯子、碗和其他食物容器 Cups, bowls and other food containers</li> <li>- 工艺用品和珠宝制作用品 Craft supplies and jewelry making supplies</li> <li>- 粉笔、蜡笔、颜料和其他美术用品 Chalk, crayons, paints and other art supplies</li> <li>- 指尖陀螺 Fingertip gyroscope</li> <li>- 服装、服装配饰、儿童和季节性派对用品 Clothing, clothing accessories, children's and seasonal party supplies</li> <li>- 钥匙、钥匙链和钥匙圈 Keys, key chains and key rings</li> <li>- 服装、鞋类、头饰及配件 Clothing, footwear, headwear and accessories</li> </ul>
	总镉 Total cadmium	≤ 75ppm	

## 美国华盛顿州 CSPA 法规要求 U.S. CSPA Regulatory Requirements in Washington State

美国华盛顿州于 2011 年颁布的 CSPA 中首次提出了儿童产品中高关注化学品的概念, 其后公布了适用于本州的 CHCC 清单。

The concept of chemicals of High Concern to Children in children's products was first proposed in the CSPA promulgated by the State of Washington in the United States in 2011, and subsequently the CHCC list applicable to this state was announced.

适用范围: 12 岁或 12 岁以下特定儿童产品 (或部件) 中的可接触材料。

Scope of application: accessible materials in certain products (or components) for children aged 12 or under.

受限物质 Restricted Substances	限量要求 Limit Requirement	涉及产品 Applicable Products
CHCC	100ppm	儿童玩具、儿童化妆品、儿童首饰、儿童服装 (包括鞋子)、儿童汽车座椅、以及意图帮助儿童吮吸和出牙、促进儿童睡眠、放松或喂食的产品。 Children's toys, children's cosmetics, children's jewelry, children's clothing (including shoes), children's car seats, and products intended to help children suck and teethe, and promote children's sleep, relaxation or feeding.

## 美国 TSCA 管控要求 U.S. TSCA Regulatory Requirements

2021 年 1 月，美国环保署 (EPA) 根据 TSCA 发布针对 5 种 PBT 物质的新的最终规则，限制这些物质的使用。关于这 5 种物质的最终规则中的限制要求，已于 2021 年 3 月 8 日起分阶段实施。

In January 2021, the US Environmental Protection Agency (EPA) issued new final rules for five PBT substances in accordance with the TSCA, restricting their use. The restrictive requirements in the final rules regarding these five substances have been implemented in phases since March 8, 2021.

受限物质 Restricted Substances	管控范围 Scope of Control	限量要求 Limited Requirement	生效日期 Implementation Date	高风险材料 / 主要用途 High-risk Materials / Main Uses
十溴二苯醚 decaBDE	含有该化学物的所有物质、 混合物和物品 All substances, mixtures and articles containing this chemical	0.1%	2021-03-08	纺织品、塑料 Textiles, plastic
异丙基化磷酸三苯酯 PIP (3:1)				塑料、液体润滑油、粘合剂、涂料 Plastic, liquid lubricating oil, adhesives, coatings
五氯苯硫酚 PCTP		1%		橡胶 Rubber
六氯丁二烯 HCBd		禁用 Not detected		橡胶、液体润滑剂、杀虫剂 Rubber, liquid lubricants, pesticides
2,4,6-三叔丁基苯酚 2,4,6-TT BP		0.3%		2026-03-08



## 美国 PFAS 管控要求 U.S. PFAS Regulatory Requirements

PFAS 全称为全氟和多氟烷基物质，是一类有机化合物，其中直链或支链中的部分或全部氢原子被氟取代。

PFAS 是一类包含数千种物质的全氟或多氟有机化合物。在美国各州都提出了 PFAS 管控法规。

PFAS, which stands for perfluorinated and polyfluoroalkyl substances, is a class of organic compounds in which some or all of the hydrogen atoms in the straight or side chains are replaced by fluorine.

PFAS is a class of perfluorinated or polyfluorinated organic compounds containing thousands of substances. PFAS control regulations have been proposed in all states of the United States.

受限物质 Restricted Substances	限量要求 Limited Requirement	涉及产品 Applicable Products
全氟烷基和多氟烷基化合物 PFAS	不得故意添加 Not detected	食品接触器具及包装、玩具、户外运动用品、纺织品、鞋材、包装材料、化妆品、化学物质及混合物等。 Food contact equipment and packaging, toys, outdoor sports goods, textiles, shoe materials, packaging materials, cosmetics, chemical substances and mixtures, etc.



## 美国包装指令 TPCH 管控要求 U.S. TPCH Packaging Regulatory Requirements

美国包装指令 TPCH 测试是指美国石化协会 (PCA) 制定的一个检测包装材料在正常使用时会释放出多少有害物质的标准。这个测试标准是为了保护消费者使用包装产品时的安全。

The TPCH test of the United States Packaging Directive refers to a standard formulated by the American Petrochemical Institute (PCA) for detecting how much of harmful substances packaging materials release during normal use. This testing standard is designed to ensure the safety of consumers when using packaged products.

受限物质 Restricted Substances	限量要求 Limited Requirement	涉及材料 Applicable Materials
铅 (Pb) 镉 (Cd) 汞 (Hg) 六价铬 (Cr)	铅 (Pb) + 镉 (Cd) + 汞 (Hg) + 六价铬 (Cr) < 100ppm	所有包装材料 All packaging materials
邻苯二甲酸酯 Phthalates	总和不得超过 Total ≤ 100ppm	增塑剂，用于可塑性材料 Plasticizer, used for plastic materials
全氟烷基和多氟烷基化合物 PFAS	不得含有 Not detected	防水和防油包装材料、纸质食品包装材料、塑料包装材料 Waterproof and oil-proof packaging materials, paper food packaging materials, plastic packaging materials

# 加拿大标准

## Canadian Standard

法案背景：2009年6月12日加拿大审议通过了《加拿大消费品安全法案》(Canada Consumer Product Safety Act, CCPSA)，并与2010年12月15日签署，自2011年6月20日起正式生效，并且取代存在近40年的加拿大《危险产品法》(HPA)第1部分和附录1，成为加拿大正式法律。

Background: On 12 June 2009, Canada reviewed and passed the Canada Consumer Product Safety Act (CCPSA), which was signed on 15 December 2010 and officially came into effect on 20 June 2011. It replaced Part 1 and Appendix 1 of Canada's Dangerous Products Act (HPA), which had existed for nearly 40 years, and became the official law of Canada.

### ▶ CCPSA 加拿大消费品安全法案法规 CCPSA (Consumer Product Safety Act of Canada) Regulations

法规 Regulations		限量要求 Limited Requirement	涉及材料 Applicable Materials
表面涂层材料法规 Surface coating materials regulations	SOR/2016-193	总铅 Total lead: 90ppm 总汞 Total mercury: 10ppm	涂层材料 Coating material
邻苯二甲酸盐法规 Phthalate regulations	SOR/2016-188	可接触 Touchable: DEHP, DBP, BBP ≤ 0.1% 可接触并可以放入口中 Accessible and can be placed in the mouth: DINP, DIDP, DNOP ≤ 0.1%	儿童玩具及护理产品中聚氯乙烯 Polyvinyl chloride
儿童珠宝法规 Children's jewelry regulations	SOR/2018-82	总铅 Total lead: 90ppm 总镉 Total cadmium: 130ppm	油漆、油墨、颜料、染料、涂层、金属、塑料、水晶、人造革 Paints, inks, pigments, dyes, coatings, metals, plastic, crystals, artificial leather 小部件: 金属, 陶瓷, 玻璃 Small components: metal, ceramic, glass
含铅消费品法规 Products containing lead regulations	SOR/2018-83	总铅 Total lead: 90ppm	<ul style="list-style-type: none"><li>- 正常使用过程中会与使用者嘴接触的产品，除了：(i) 厨房用具；(ii) 适用釉陶瓷和玻璃器皿条例的产品。 Products that will come into contact with the user's mouth during normal use, except for: (i) Kitchenware; (ii) Products subject to the Glazed Ceramics and Glassware Ordinance.</li><li>- 14岁以下儿童使用的服装或者服装配件。 Clothing or clothing accessories for children under 14 years old.</li><li>- 14岁以下儿童学习或者玩耍的产品。 Products for children under 14 years old to study or play with.</li><li>- 14岁以下儿童使用的书本或者类似印刷产品，除了以下产品： (i) 印刷在纸张或者硬纸板上； (ii) 用传统材料并用传统方式印刷和装订。 Books or similar printed products for children under the age of 14, except for the following products: (i) Printed on paper or cardboard; (ii) Use traditional materials and print and bind in traditional ways.</li><li>- 辅助4岁以下儿童放松、睡眠、卫生或者运送的产品。 Products that assist children under the age of 4 in relaxation, sleep, hygiene or transportation.</li></ul>
玩具法规 Toy regulations	SOR/2011-17	涂层的重金属 Heavy metals for coatings	涂层 Coating

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