

## 国内外相关认证项目简介

### 1. CE认证

CE标志是产品进入欧盟国家及欧盟自由贸易协会国家市场的“通行证”。任何规定的（新方法指令所涉及的）产品，无论是欧盟以外还是欧盟成员国生产的产品，要想在欧盟市场上自由流通，在投放欧盟市场前，都必须符合指令及相关协调标准的要求，并且加贴CE标志。

### 2. FDA认证

FDA（美国食品和药物管理局，Food and Drug Administration）是美国政府在健康与人类服务部（DHHS）和公共卫生部（PHS）中设立的执行机构之一，FDA的职责是确保美国本国生产或进口的食品、化妆品、药物、生物制剂、医疗设备和放射产品的安全。

### 3. CCC认证

3C（中国强制认证，China Compulsory Certification）认证是中国按照世贸有关协议和国际通行规则，依法对涉及人类健康安全、动植物生命安全和健康，以及环境保护和公共安全的产品实行统一的强制性产品认证制度。

### 4. UL认证

UL（美国保险商实验室，Underwrites Laboratories Inc.）认证是采用一套严密的组织管理体制、标准开发和产品认证程序来研究确定各种材料、装置、产品、设备、建筑等对生命、财产有无危害的一种认证，其最终目的是为市场提供具有相当安全水准的商品。

### 5. GS认证

GS（德国安全，Germany Safety）认证是以德国产品安全法（SGS）为依据，按照欧盟统一标准EN或德国工业标准DIN进行检测的一种自愿性认证，是欧洲市场公认的德国安全认证标志。

### 6. CB认证

CB认证是国际电工委员会电工产品合格测试与认证组织（IECEE）以IEC标准为基础对电工产品安全性能进行的一种认证，其测试结果即CB测试报告和CB测试证书，证书在

IECEE各成员国得到相互认可，目的是为了减少由于必须满足不同国家认证或批准准则而产生的国际贸易壁垒。

### 7. ROHS 认证

ROHS（电子电气设备中限制使用某些有害物质指令，The Restriction of the use of certain Hazardous substances in Electrical and Electronic Equipment）认证是欧盟议会和欧盟理事会实施的在电子电气设备中限制使用某些有害物质指令，也称2002/95/EC指令，2005年欧盟又以2005/618/EC决议的形式对2002/95/EC进行了补充，明确规定了六种有害物质的最大限量值。2006年7月1日，欧盟《关于在电子电气设备中限制使用某种危险物的指令》中规定，新投放欧盟市场的电子电气设备中限制使用铅、汞、镉、六价铬、多溴联苯和多溴二苯醚6种有害物质。

### 8. MSDS认证

MSDS（化学材料安全评估报告，Material Safety Data Sheet）认证是关于传递化学品危害信息的重要报告，内容包括：说明对应化学品对人类健康和环境的危害性并提供如何安全搬运、贮存和使用该化学品的信息；说明危险化学品的燃、爆性能，毒性和环境危害，以及安全使用、泄漏应急救护处置、主要理化参数、法律法规等方面的信息；说明化学品的理化特性（如PH值，闪点，易燃度，反应活性等）以及对使用者的健康（如致癌，致畸等）可能产生危害的信息。随着发达国家环境保护意识的加强，目前美国、日本、欧盟等发达国家已经普遍建立并实行了MSDS认证制度，要求化学品的生产厂家在销售、运输或出口其产品时，必须进行MSDS评估认证。

### 9. 聚烯烃管材认证

LTHS试验（长期静液压强度，Long-term hydrostatic strength of thermoplastics materials in pipe form by extrapolation）是根据ISO/DIP9080.2标准来外推预测管材专用料50年的使用寿命的一种试验方法，用于对管材专用料进行分级。

SCG试验（抗慢速裂纹增长，Resistance to slow crack growth）是根据GB/T 18476-2001标准表征PE管材料的性能的一种试验方法，用来评价管材专用料抵抗管材从小的银纹发展成裂纹的能力。

RCP试验（耐快速裂纹扩展，Determination of resistance to rapid crack propagation）是根据ISO 13477:1997标准表征PE管材料的性能的一种试验方法，用来评价管材在低温下抵抗快速开裂的性能。

#### 10. 食品卫生检测

本手册中“食品卫生”，指中国政府针对食品包装容器、包装材料所制定的强制性标准，要求用于食品包装容器、包装材料的聚乙烯、聚丙烯、聚苯乙烯及聚氯乙烯必须符合相应的《食品包装用聚乙烯树脂卫生标准》（GB9691-1988）、《食品包装用聚丙烯树脂卫生标准》（GB9693-1988）、《食品包装用聚苯乙烯树脂卫生标准》（GB9692-1988）及《食品容器、包装材料用聚氯乙烯树脂卫生标准》（GB4803-1994），丙烯腈-丁二烯-苯乙烯(ABS)类产品按GB/T 5009.60-2003和 GB/T5009.152-2003的规定执行，通过检测的方可用于生产食品包装容器、包装材料。

#### 11. 饮水卫生检测

本手册中“饮水卫生”，指中国政府针对输配水设备及防护材料所制定的强制性标准，要求凡与饮用水接触的输配水设备及防护材料不得污染水质。用于输配水的设备及防护材料必须符合《生活饮用水输配水设备及防护材料的安全性评价标准》（GB/T17219-1998），通过检测的方可用于输送饮用水或生产输配水设备。

#### 12. 医药卫生检测

本手册中“医药卫生”，指中国政府针对医用输液、输血、注射器具用聚丙烯专用料所制定的强制性标准，要求用于输液、输血、注射器具用聚丙烯必须符合《医用输液、输血、注射器用聚丙烯专用料》标准（YY0242-2007），通过检测

的方可用于生产医用输液、输血、注射器具。

#### 13. EN71系列标准

EN71是欧盟市场玩具类产品的规范标准，通过对进入欧洲市场的玩具产品进行技术规范，从而减少或避免玩具对儿童的伤害。EN71对玩具材料进行了定义，规定了测试范围及以暴露方式（与嘴接触；摄取可能；皮肤接触；眼接触；吸入）存在于玩具或玩具材料中可溶性有害元素含量及有毒化学物质的迁移总量的限量，要求生产公司必须保证其产品在该地区销售前符合相关标准，制造商必须对因生产缺陷、不良设计或不适当材料的使用而导致的事故负责。

#### 14. PAHs认证

多环芳烃PAHs是一种高致癌的物质，损伤生殖系统，易导致皮肤癌，肺癌，上消化道肿瘤，动脉硬化及不育症等，德国政府强制规定，要求在2008年4月1日起所有GS标志认证中强制加入PAHs多环芳香烃测试，在德国出售的电动工具必须经过检验其中不含有过量的PAHs，要进入德国市场的电动工具必须通过专业的检验机构的检测。

# Introduction of Domestic and Foreign Certifications

## 1. CE Marking

CE Marking is a “passport” which allows products to be freely circulated within European Union (EU) and European Free Trade Area (EFTA) member States. Any specified products (covered by the New Approach Directives), whether made by EU members or not, must meet the requirements of Product Directives and relevant Harmonized Standards and bear CE mark before being placed on the EU market.

## 2. FDA Certification

Food and Drug Administration (FDA) is an agency of the United States Department of Health and Human Services (DHHS) and the Public Health Service (PHS). It is responsible for regulating and supervising the safety of foods, cosmetics, medicines, biological medical products, medical devices and radiation-emitting devices produced domestically or imported to the United States market.

## 3. CCC

China Compulsory Certification (CCC) is a uniform and compulsory product certification system in China which has been established in accordance with relevant WTO protocols and international practice to ensure the safety of products concerned with the health of human beings, animals and plants, the environment and public security.

## 4. UL Certification

Underwrites Laboratories Inc. (UL) adopts a set of strict organizational management system, standards development process and product certification procedure to evaluate whether materials, equipments, products, devices and buildings may do harm to human health and property security. The certification is aimed to provide safe commodities to markets.

## 5. GS Certification

GS (Geprüfte Sicherheit=tested safety) mark is a voluntary product safety certification mark based on German Act GPSG (Equipment and Product Safety Act), in line with EU Standards or Deutsche Industrie-Norm (DIN). It is a well-known and respected German safety certification mark across the European market.

## 6. CB Certification

CB certification is a scheme established by IECEE based on IEC standards to test the safety of electrical products. The test results are presented in a CB testing report which will be accompanied

by a CB certificate. The certificate is recognized among IECEE members with an aim of breaking down international trade barriers resulting from the requirements for meeting different certifications or approval criteria of different countries.

## 7. ROHS Certification

EU Directive on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (ROHS), also known as the 2002/95/EC Directive, is adopted by the European Parliament and the Council of European Union to restrict the use of hazardous materials in the manufacture of various types of electronic and electrical equipment. In 2005, EU supplemented the 2002/95/EC with a Decision 2005/618/EC and specified the maximum concentration values for six hazardous substances. The ROHS directive issued by the European Union on July 1, 2006 restricted the use of six hazardous substances -- lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls and polybrominated biphenyl ether – in electrical and electronic products put on the EU market.

## 8. MSDS Certification

Material Safety Data Sheet (MSDS) is a significant report conveying information on the dangerous properties of given chemicals. It identifies the hazards of chemicals on human health and environment and provides with procedures for handling, storing and working with the chemicals in a safe manner. It includes such information as hazardous chemicals' explosive properties, toxicity and environmental hazards, procedures for safe use and emergency handling and the related laws and regulations. The MSDS also provides information on the physicochemical properties of chemicals such as pH value, flash point, degree of inflammability and reactivity and other information on the possible injuries to users (causing cancer or monstrosity). As the developed world is increasingly concerned about environmental issues, most developed countries such as U.S., Japan and EU members have had the MSDS certification system at large, under which chemical producers are required to submit MSDS reports when selling, transporting or exporting their products.

## 9. Polyolefin Pipes Certification

The LTHS test (Long-Term Hydrostatic Strength test) is a test following the ISO/DP9080.2 standard to judge by extrapolation

whether or not the lifetime of thermoplastics materials in pipe form can last 50 years. It is used to classify specialty piping materials.

SCG test (Resistance to Slow Crack Growth test) is a test following the GB/T 18476-2001 standard to characterize the performance of PE piping materials. The test is used to evaluate the ability of specialty piping materials to resist the growth from crazes to cracks.

RCP test (Determination of Resistance to Rapid Crack Propagation test) is a test following the ISO 13477: 1997 standard to characterize the performance of PE piping materials. This test is used to evaluate the ability of piping materials to resist fast cracking at low temperatures.

#### 10. Food Sanitation Test

Food Sanitation Test is adopted to meet the compulsory criteria enacted by Chinese government, stipulating that PE,PP,PS and PVC resins used in food packaging containers and materials should comply with relevant criteria, including Sanitation Criteria for PE Resin in Food Packaging (GB9691 – 1988), Sanitation Criteria for PP Resin in Food Packaging (GB9693 – 1988), Sanitation Criteria for PS Resin in Food Packaging (GB9692 – 1988) and Sanitation Criteria for PVC Resin in Food Container and Packaging Material (GB4803 – 1994). ABS resin in food packaging is tested with GB/T 5009.60-2003 and GB/T5009.152-2003. The resins must pass the tests before they are used to produce food packaging containers and materials.

#### 11. Drinking Water Sanitation Test

Drinking Water Sanitation Test is adopted to meet the compulsory criteria enacted by Chinese government, stipulating that water distribution equipment and protective materials should not pollute drinking water. All water distribution equipment and protective materials must comply with the requirements of Standard for Safety Evaluation of Equipment and Protective Materials in Drinking Water System (GB/T17219-1998) and pass the test before being used to distribute drinking water or to produce distribution equipment.

#### 12. Medical Sanitation Test

Medical Sanitation Test is adopted to meet the compulsory criteria enacted by Chinese government, stipulating that PP resins used in infusion, transfusion and injection equipments for medical use should comply with the requirements of Polypropylene Material

for Manufacture of Infusion, Transfusion and Injection Equipments for Medical Use (YY0242 – 2007). The resins must pass the tests before they are used to produce infusion, transfusion and injection equipments for medical use.

#### 13. EN71 Series Standards

EN71 contains series standards with conformity to EU Toy Safety Directives. EN71 sets down technical criteria which toy products must meet before being placed on EU market, in order to reduce or avoid possible harm to children. EN71 makes definitions of toy materials, prescribes testing scopes and specifies requirements for migration or content of certain hazardous organic chemical compounds in toys and toy materials through all possible exposure routes: Mouthing, Ingestion, Skin contact, Eye contact and Inhalation. The manufacturers are asked to ensure the toy products comply with EN71 standards and be liable for any accident caused by defect production, faulty design and improper material application.

#### 14. PAHs Testing

Polycyclic Aromatic Hydrocarbons (PAHs) are a group of carcinogenic chemicals that may hurt reproductive health and cause other problems such as skin cancer, lung cancer, upper gastrointestinal tumor, arteriosclerosis and infertility. Effective from April 1 2008, German Government add the new mandatory requirement of polycyclic aromatic hydrocarbons (PAHs) testing in GS Mark certified. All electronic products intended for use in households and in the workplace, to be placed on German market, must be certified by authoritative testing organization demonstrating acceptable levels of PAHs.