近年来,电子电器产品中的有害物质所引发的健康及环境危害问题被广泛关注,为限制其中特定有害物质的使用,欧盟率先颁布了RoHS指令(2002/95/EC),并于2007年6月1日进入正式实施阶段,其后美国、中国、日本、韩国的RoHS指令也相继颁布出台,相关环保法规的日趋严格和不断完善,给电子电器产品的制造商、经销商带来了巨大的挑战。

SKYTE可依据各国的环保法规标准提供有害物质含量测试服务,并可帮助您制定有害物质管控方案, 帮助您的产品符合相关法规的要求,从而顺利赢得市场。

In recent years, The concern about health hazard and environmental pollution caused by harmful substances of electrical & electronic products are widespreading, In order to restrict the use of certain hazardous substances in E&E products, EU take the lead in publishing the RoHS Directive (2002/95/EC) and officially implement the directive from June 1, 2007, United States, China, Japan, South Korea also released their RoHS directive successively, With these rigorous environmental protection regulation being updated continuously, the manufacturers and retailers of electrical & electronic products is facing increasing challenge.

SKYTE provide testing service and comprehensive solution for the control of hazardous substances in E&E products, support our client's success in environment–friendly and success in golobal market.

法规名称 Regulation	限制物质 Restriction Substances
欧盟(EU) RoHS (2002/95/EC)	Pb Cd Hg Cr ⁶⁺ PBB PBDE
挪威 Norway PoHS	双酚A、三氯生等10种物质 Bisphenol A, triclosan etc. 10 substances
德国GS认证强制要求PAHs测试 PAHs Testing required by Germany GS certification	萘、苯并(a)芘等16种物质 Nap,Bap,etc. 16 substances
PFOS 指令(Directive) (2006/122/EC)	全氟辛烷磺酸盐/PFOS
REACH (1907/2006/EC)	第一批15种高度关注物质 The first batch 15 SVHC 第二批15种高度关注物质 The second batch 15 SVHC

其它有害物质检测

Other Hazardous Substances Testing

非政府组织或协会 Non-Governmental Organizations & Associations

《蒙特利尔议定书》 Montreal Protocol on Substances that Deplete the Ozone Layer

《斯德哥尔摩公约》 Stockholm Convention on Implementing International Action on Certain Persistent Organic Pollutants

IEC印制板材料法规 IEC61249-2-21 Materials for printed boards and other interconnecting structures - Part 2-21

JPCA (Japan Printed Circuit Association) 日本电路板协会

> 国际印刷电路组织 Association Connecting Electronics Industries

美国各州法案 State Act of Unite States 限制物质 Restriction Substances

氟氯烷烃(CFCs),海龙(Halon), 氢氯氟烃(HCFCs),氢溴氟烃(HBFCs)

艾氏剂、狄氏剂、异狄氏剂、滴滴涕、七氯、氯丹、灭蚁灵、毒杀芬、六氯苯、多氯联苯、二恶英和呋喃 Aldrin, dieldrin, endrin, DDT, heptachlor, chlordane, mirex, toxaphene, hexachlorobenzene, PCBs, dioxins and furans

总氯(Total chlorine) < 900ppm 总溴(Total bromine) < 900ppm 总氯(Total chlorine) + 总溴(Total bromine) < 1500ppm

> 总溴(Total bromine)< 900ppm 总氯(Total chlorine)< 900ppm

在2006年6月修正IPC-4101B, 卤素限制要求同IEC 61249-2-21 IPC-4101B revised in June, 2006, the limit requirement of halogen is same as IEC 61249-2-21

五溴联苯醚、八溴联苯醚 Pentabromobiphenyl ether Octabromobiphenyl ether





欧盟《关于化学品注册、评估、许可和限制法规》(REACH法规)已于2007年6月1日开始全面实施。 REACH是一套统一的化学品管理法规,涉及约3万种化学物质,其主要内容如下:

EU regulation of Registration, Evaluation, Authorisation and Restriction of chemicals (REACH) has entered into force on 1 June, 2007. REACH is a unified set of chemicals administrative regulation, involving about 30,000 kinds of chemical substances, its main contents are as following:

- ▶ 年生产量或进口量达到或超过1吨的所有"现有"或"新"的化学物质都要进行注册 A registration should be submitted if the 'existing' or 'new' substance is produced or imported in EU in quantities totalling over 1 tonne per producer or importer per year.
- 通过安全数据表(SDS)加强供应链中信息的流通 Reinforce the information transmission in supply chain through safe data sheets.
- 对部分已注册物质进行评估
 Evaluations will be performed on certain registered substance.
- ▶ 高度关注物质(SVHC)的使用和投放市场必须经过许可 Any producer or importer of an article containing a substance of very high concern should get a warrant for use or placing in the market of such an article.
- ▶ 对不被接受物质的限制
 Restriction the manufacturer placing on the market or use of a unacceptable substance.
- 成立化学品管理局(ECHA)来管理整个系统
 A European Chemicals Agency is established for ensuring effective management of the whole system.

REACH几乎涵盖了所有出口到欧盟的产品(除了食品、药品和农药),应对REACH 法规的要求,供应链中的各个环节都需承担相应的义务:

REACH almost covers all products which will be exported to EU (excluding food, drugs and pesticides), in order to cope with REACH regulations, all departments of the supply chain will undertake the corresponding obligations:

- 化学品供应商:传递化学品信息、提供SDS Chemical supplier: Transferring information of chemical and providing safe data sheets.
- ▶ 原材料供应商:收集化学品信息、传递化学品信息、检查是否存在SVHC Raw material supplier: Collecting and transmitting the information of chemical, checking if there is SVHC exist in material or not.
- 非欧盟物品制造商:收集化学品信息、传递化学品信息、按照要求进行预注册、通知存在的SVHC Non-EU manufacturer: Collecting and transmitting the information of chemical, proceeding pre-registration per related requirement and informing the existing SVHC.
- ▶ 品牌商:按照要求进行预注册、收集/通知存在的SVHC、收集SDS作准备、通报计算、证明尽忠职守 Brands: Proceeding pre–registration per related requirement, collecting and informing the existing SVHC, gathering safe data sheets as preparation, reporting and calculating, responsibility certification.
- >>> 零售商:按照要求进行预注册、收集/通知存在的SVHC、收集SDS作准备、通报计算、证明尽忠职守Retailer: Proceeding pre-registration per related requirement, collecting and informing the existing SVHC, gathering safe data sheets as preparation, reporting and calculating, responsibility certification.

相关服务 Relevant Service

SKYTE凭借化学检测领域的专才和丰富的化学测试经验为您提供以下REACH解决方案:

With expertise in chemistry and extensive experience in chemical testing, SKYTE provide below solution of REACH for you:

- ▶ 物质/配制品/物品中SVHC扫描及定量测试 SVHC scan and quantitative detection on substance / preparations / articles
- ▶ 安全数据表(SDS)的制作 Compilation of the safe data sheets (SDS)
- ▶〉 化学文件管理系统审核 Auditing the chemical document management system
- ▶ REACH法规培训与咨询
 Providing training and consulting of REACH regulation