

## 测试报告

No. CANEC1111933301

日期: 2011年12月20日

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深圳市盛联焊锡制品有限公司

中国深圳市宝安区湖滨路新乐工业园3栋3楼

以下测试之样品是由申请者所提供及确认: 无铅锡丝

SGS工作编号: CP11-013411 - SZ

测试样品信息: Sn99.3-Cu0.7

客户参考信息: Sn96.5-Ag3.0-Cu0.5

样品接收日期: 2011年12月14日

测试周期: 2011年12月14日 - 2011年12月20日

测试要求: 根据客户要求测试

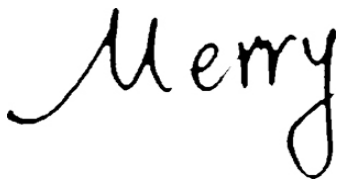
测试方法: 请参见下一页

测试结果: 请参见下一页

结论: A:基于所送样品进行的测试, 铅、镉、汞、六价铬、多溴联苯、多溴二苯醚的测试结果符合欧盟RoHS指令2002/95/EC的重订指令2011/65/EU附录II的限值要求。

通标标准技术服务有限公司

授权签名



Merry Lv 吕爱凤

批准签署人

备注: 根据客户申请, SGS出具了此中文报告, 英文版本可根据客户要求提供. (The Chinese test report is issued according to the applicant's request. The English version is available from SGS if further needed)

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测试结果:

样品部件外观描述:

样品编号	SGS样品ID	描述
1	CAN11-119333.001	银色金属线

备注:

- (1) 1 mg/kg = 1 ppm = 0.0001%
- (2) MDL = 检测极限值
- (3) ND = 未检出 (< MDL)
- (4) "-" = 未规定

### A: RoHS指令2011/65/EU

测试方法: 参考IEC 62321:2008:

- (1) 用ICP-OES测定镉的含量.
- (2) 用ICP-OES测定铅的含量.
- (3) 用ICP-OES测定汞的含量.
- (4) 用点测试法/紫外-可见分光光度计比色法测定六价铬的含量.
- (5) 用GC-MS测定PBBs(多溴联苯)和PBDEs(多溴二苯醚) 的含量

测试项目	限值	单位	MDL	001
镉(Cd)	100	mg/kg	2	ND
铅(Pb)	1,000	mg/kg	2	51
汞(Hg)	1,000	mg/kg	2	ND
六价铬(Cr(VI))	-	-	◇	Negative
多溴联苯之和(PBBs)	1,000	mg/kg	-	ND
一溴联苯	-	mg/kg	5	ND
二溴联苯	-	mg/kg	5	ND
三溴联苯	-	mg/kg	5	ND
四溴联苯	-	mg/kg	5	ND
五溴联苯	-	mg/kg	5	ND
六溴联苯	-	mg/kg	5	ND
七溴联苯	-	mg/kg	5	ND
八溴联苯	-	mg/kg	5	ND
九溴联苯	-	mg/kg	5	ND
十溴联苯	-	mg/kg	5	ND
多溴二苯醚之和(PBDEs)	1,000	mg/kg	-	ND
一溴二苯醚	-	mg/kg	5	ND

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测试项目	限值	单位	MDL	001
二溴二苯醚	-	mg/kg	5	ND
三溴二苯醚	-	mg/kg	5	ND
四溴二苯醚	-	mg/kg	5	ND
五溴二苯醚	-	mg/kg	5	ND
六溴二苯醚	-	mg/kg	5	ND
七溴二苯醚	-	mg/kg	5	ND
八溴二苯醚	-	mg/kg	5	ND
九溴二苯醚	-	mg/kg	5	ND
十溴二苯醚	-	mg/kg	5	ND

备注:

(1) 最大允许极限值引用自指令2011/65/EU 附录II.

(2) ◇ =a. **Negative**为未检测到六价铬;  
b. **Positive** 为检测到六价铬.

针对金属表面的防腐涂层: 由于未获知样品的存储条件和生产日期, 样品的六价铬测试结果仅代表测试时样品的状态.

### B: 卤素

测试方法: 参照EN 14582:2007方法测定, 采用IC进行分析.

测试项目	限值	单位	MDL	001
氟 (F)	-	mg/kg	50	ND
氯 (Cl)	-	mg/kg	50	125
溴 (Br)	-	mg/kg	50	56
碘 (I)	-	mg/kg	50	ND

### C: 六溴环十二烷(HBCDD)

测试方法: 参考IEC 62321:2008, 采用GC-MS分析六溴环十二烷含量.

测试项目	限值	单位	MDL	001
六溴环十二烷(HBCDD)	-	mg/kg	10	ND

备注:

(1) 参考信息: RoHS指令2002/95/EC的重订指令2011/65/EU:

六溴环十二烷(HBCDD) 被列为需优先进行风险评估和考虑进行限制的物质.

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## D:邻苯二甲酸盐(或酯)

测试方法: 参考EN 14372: 2004的方法测定, 采用GC-MS进行分析.

测试项目	单位	MDL	001
邻苯二甲酸二丁酯 (DBP)	%(w/w)	0.003	ND
邻苯二甲酸丁酯苄酯 (BBP)	%(w/w)	0.003	ND
邻苯二甲酸二(2-乙基己基) (DEHP)	%(w/w)	0.003	ND

备注:

(1) 参考信息: RoHS指令2002/95/EC的重订指令2011/65/EU:

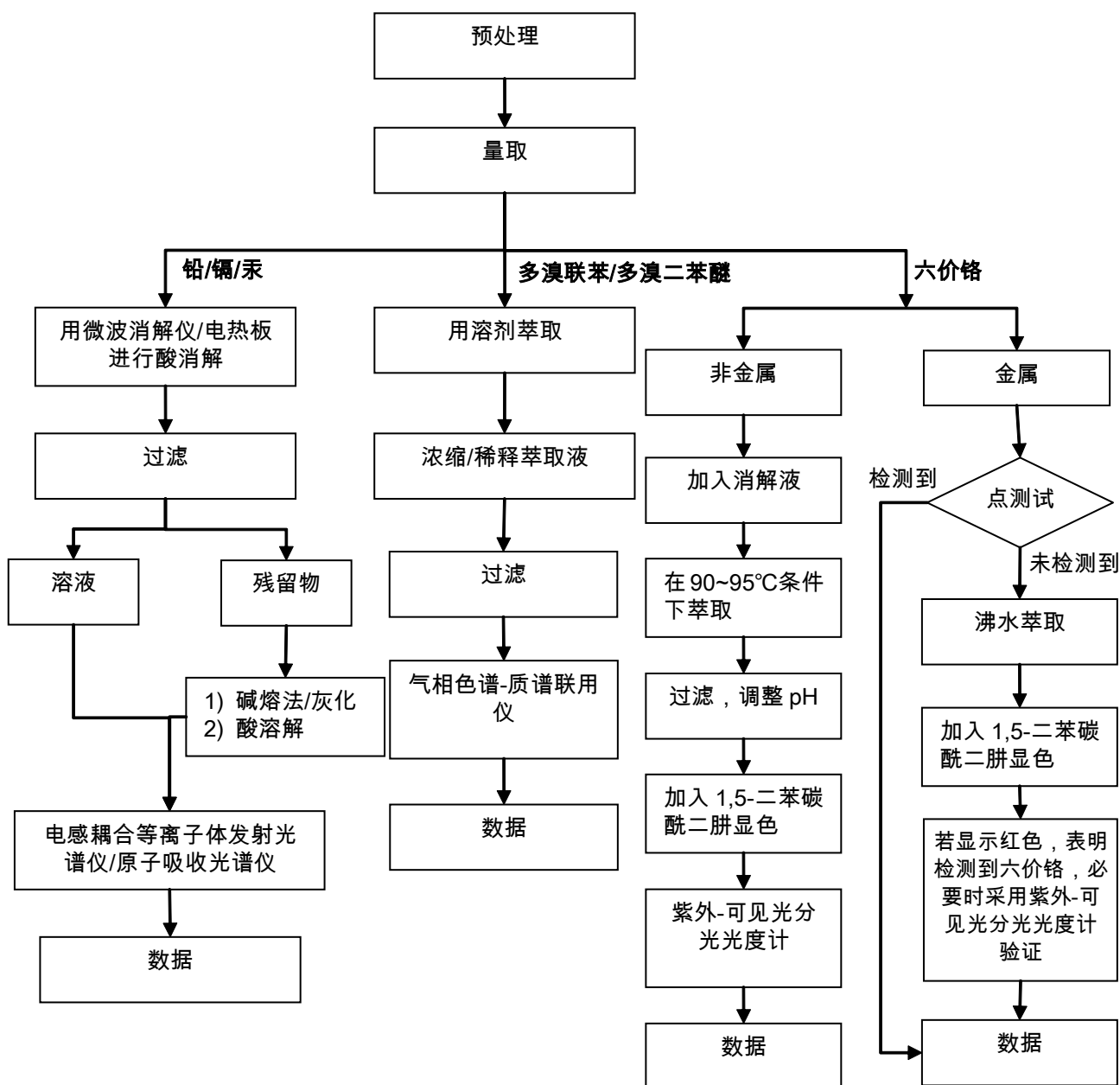
邻苯二甲酸二(2-乙基己基)酯(DEHP), 邻苯二甲酸丁酯苄酯(BBP)和邻苯二甲酸二丁酯(DBP) 被列为需优先进行风险评估和考虑进行限制的物质.

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## 附件

### RoHS 测试流程图

- 1) 分析人员: 汪丹 / 余晓璐 / 詹达琦
- 2) 项目负责人: 余奕东 / 杨伟兴
- 3) 样品按照下述流程被完全消解 (六价铬和多溴联苯/多溴二苯醚测试除外)。



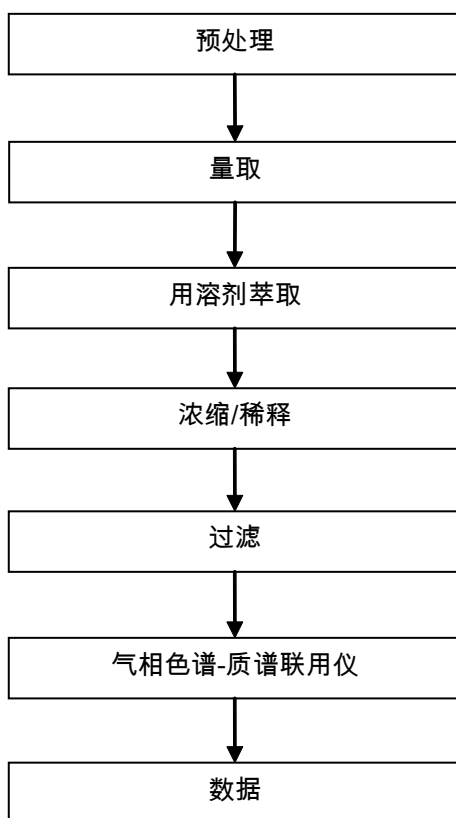
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## 附件

### Phthalates 测试流程图

- 1) 分析人员：赵瑞娜
- 2) 项目负责人：杨伟兴

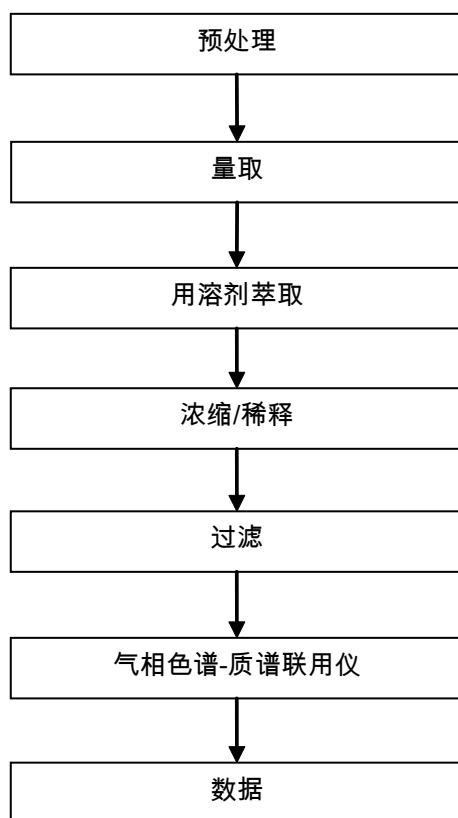


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## 附件

## HBCDD 测试流程图

- 1) 分析人员: 余晓璐
- 2) 项目负责人: 杨伟兴

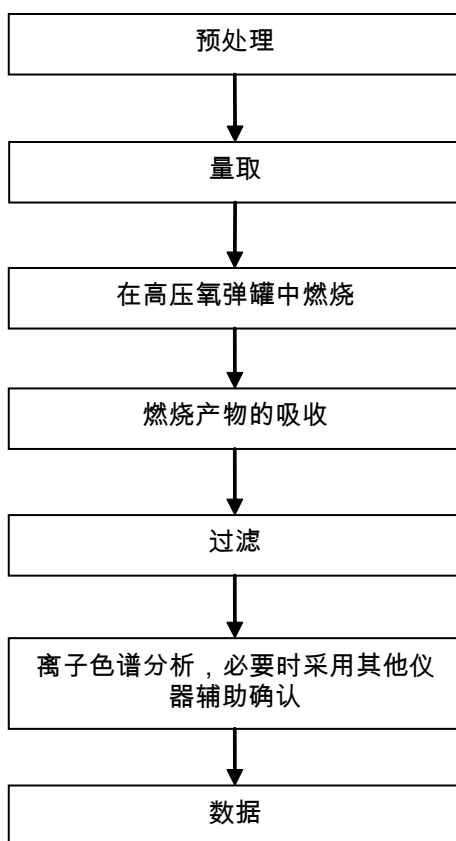


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## 附件

### Halogen 测试流程图

- 1) 分析人员：宋一波
- 2) 项目负责人：乔俊娟



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