

## 测试报告

No. SZXEC1800631102

日期: 2018年05月02日 第1页,共5页

赣州领创电路科技有限公司  
中国江西省赣州市信丰县工业园区电子器件产业基地

以下测试之样品是由申请者所提供及确认: 无铅喷锡 PCB

SGS工作编号: RP18-006102 - SZ  
样品接收日期: 2018年04月26日  
测试周期: 2018年04月26日 - 2018年05月02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: 基于所送样品进行的测试, 镉、铅、汞、六价铬、多溴联苯(PBBs)、多溴二苯醚(PBDEs)的测试结果不超过欧盟RoHS指令2011/65/EU附录II的修正指令(EU) 2015/863的限值要求。

通标标准技术服务有限公司深圳分公司  
授权签名

Sunny Nie 聂芳敏  
批准签署人

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SGS-CSTC Standards Technical Services Co., Ltd.  
Shenzhen Branch Testing Center Chemical Laboratory

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测试结果:

### 测试样品描述:

| 样品编号 | SGS样品ID          | 描述      |
|------|------------------|---------|
| SN1  | SZX18-006311.001 | 绿色“PCB” |

备注:

- (1) 1 mg/kg = 1 ppm = 0.0001%
- (2) MDL = 方法检测限
- (3) ND = 未检出 (< MDL)
- (4) "-" = 未规定

### RoHS指令2011/65/EU附录II的修正指令(EU) 2015/863

测试方法: 参考IEC 62321-4:2013+A1:2017, IEC 62321-5:2013, IEC 62321-7-2:2017, IEC 62321-6:2015, 采用ICP-OES,UV-Vis和GC-MS进行分析.

| 测试项目           | 限值    | 单位    | MDL | 001 |
|----------------|-------|-------|-----|-----|
| 镉 (Cd)         | 100   | mg/kg | 2   | ND  |
| 铅 (Pb)         | 1,000 | mg/kg | 2   | 5   |
| 汞 (Hg)         | 1,000 | mg/kg | 2   | ND  |
| 铬 (Cr)         | -     | mg/kg | 8   | IN  |
| 六价铬 (Cr(VI))   | 1,000 | mg/kg | 8   | ND  |
| 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  |
| 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  |

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| 测试项目  | 限值 | 单位    | MDL | 001 |
|-------|----|-------|-----|-----|
| 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) 最大允许限值引用自RoHS指令(EU) 2015/863。

IEC 62321系列等同于 EN 62321系列

[http://www.cenelec.eu/dyn/www/f?p=104:30:1742232870351101:::FSP\\_ORG\\_ID,FSP\\_LANG\\_ID:1258637,25](http://www.cenelec.eu/dyn/www/f?p=104:30:1742232870351101:::FSP_ORG_ID,FSP_LANG_ID:1258637,25)

(2) 2015年6月4号发表在欧盟官方杂志(官方公报)上的RoHS指令(EU) 2015/863附录II限值中还包括邻苯二甲酸酯BBP, DBP, DEHP和DBP。新的指令限制了电子电器产品的每一个均一材质中邻苯二甲酸酯含量不得超过0.1%。

(3) 2021年7月22号开始, DEHP, BBP, DBP 和 DIBP的限制适用于医疗器械, 包括体外医疗器械, 监控仪表, 包括工业监测和控制仪器。

(4) DEHP, BBP, DBP 和 DIBP的限制不适用于2019年7月22日前投放市场的电缆及电子电气产品中用于维修、重复利用、功能更新及容量提升的备用配件以及2021年7月22日前投放市场的医疗器械, 包括体外医疗器械, 监控仪表, 包括工业监测和控制仪器。

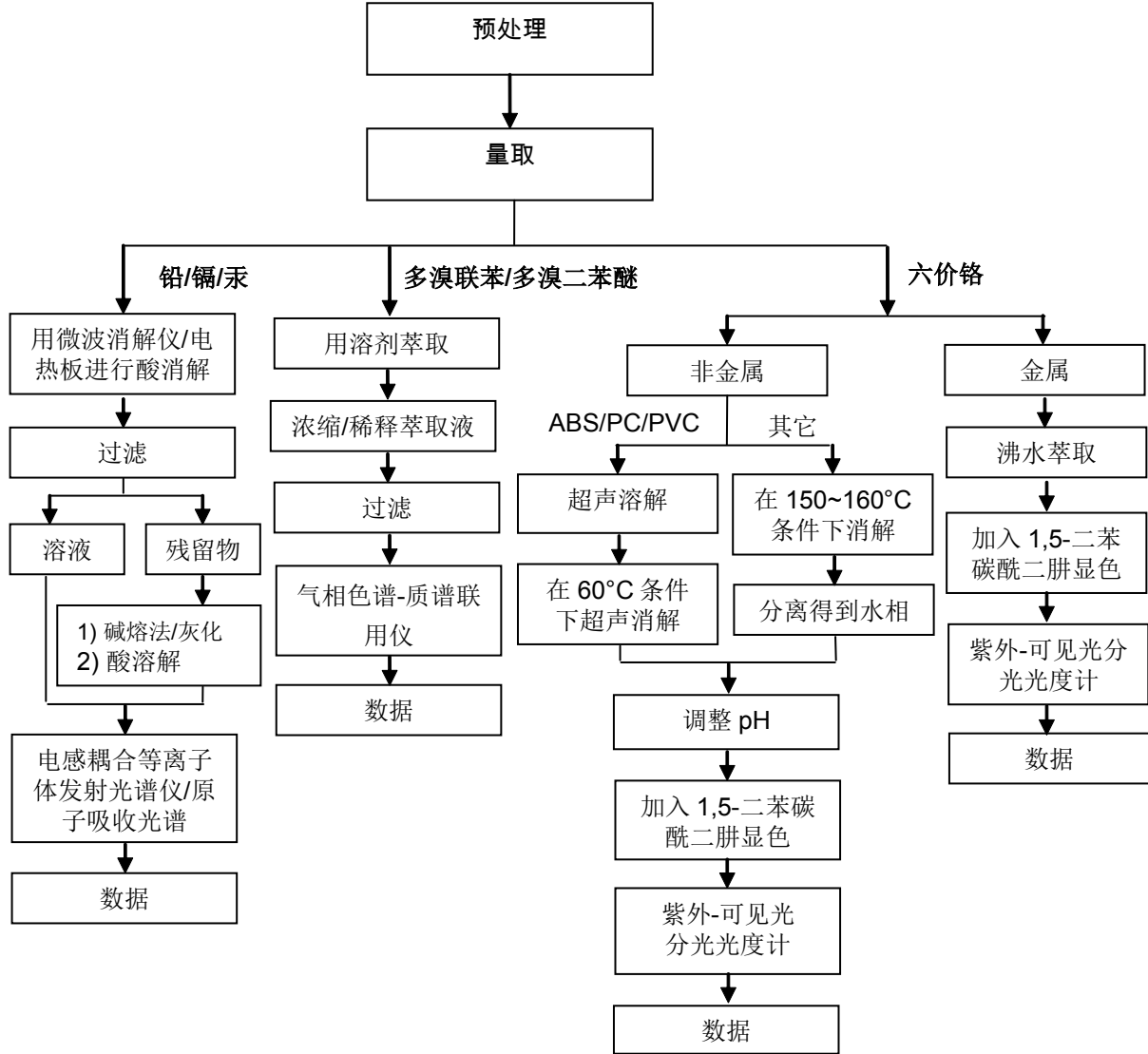
(5) DEHP、BBP 和 DBP的限制不适用于玩具产品, 因为No.1907/2006附录XVII第51条已对玩具产品中的DEHP、BBP 和 DBP含量进行了限制。



附件

## Pb/Cd/Hg/Cr<sup>6+</sup>/PBBs/PBDEs 测试流程图

- 1) 分析人员: 邓焕梁 / 麦康志 / 任秋美
- 2) 项目负责人: 罗敏仪 / 周文凯 / 童妙琦
- 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)。



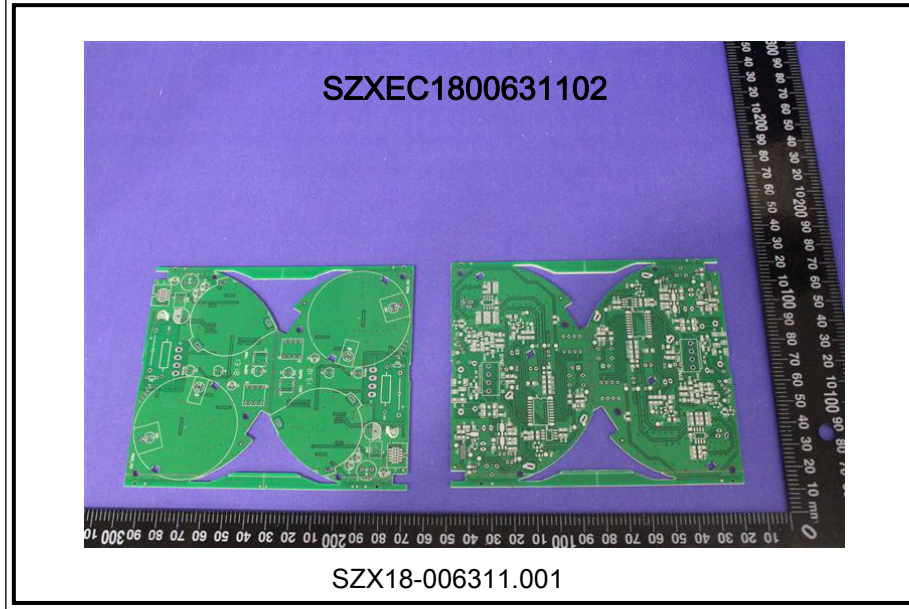
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