

No. SZXEC1600108306

日期: 2016年12月07日 第1页,共7页

深圳市联贺电子有限公司

中国深圳市龙岗区龙城街道黄阁路441号龙岗天安数码城创新园一号厂房B1204-5

以下测试之样品是由申请者所提供及确认: 牛皮纸

SGS工作编号: RP16-001085 - SZ

型号: UG-119

买家: 印刷线路板软板制造商

样品接收日期: 2016年12月02日

测试周期: 2016年12月02日 - 2016年12月07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

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 结论:

> 醚(PBDEs)、邻苯二甲酸酯(如邻苯二甲酸二丁酯 (DBP)、邻苯二甲酸丁苄 酯(BBP)、邻苯二甲酸二(2-乙基已基)酯(DEHP)和邻苯二甲酸二异丁酯(DIBP))的 测试结果符合欧盟RoHS指令2011/65/EU附录II的修正指令(EU) 2015/863的限值

要求。

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Sunny Nie聂芳敏 批准签署人

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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 SZX16-001083.003 棕色片状物

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: (1)参考IEC 62321-5:2013,用ICP-OES测定镉的含量

(2)参考IEC 62321-5:2013,用ICP-OES测定铅的含量

(3)参考IEC 62321-4:2013,用ICP-OES测定汞的含量

(4)参考IEC 62321:2008,用紫外-可见分光光度计比色法测定六价铬的含量

(5)参考IEC 62321-6:2015,用GC-MS测定PBBs(多溴联苯)和PBDEs(多溴二苯醚)的含量

(6) 参考IEC 62321-8:2013(111/321/CD),用GC-MS测定邻苯二甲酸酯的含量

<u>测试项目</u>	限值	<u>单位</u>	<u>MDL</u>	<u>003</u>
镉 (Cd)	100	mg/kg	2	ND
铅 (Pb)	1,000	mg/kg	2	ND
汞 (Hg)	1,000	mg/kg	2	ND
六价铬(Cr(VI))	1,000	mg/kg	2	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



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<u>测试项目</u>	<u>限值</u>	<u>单位</u>	<u>MDL</u>	<u>003</u>
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
邻苯二甲酸二丁酯 (DBP)	1000	mg/kg	50	ND
邻苯二甲酸丁苄酯(BBP)	1000	mg/kg	50	ND
邻苯二甲酸二(2-乙基己基)酯(DEHP)	1000	mg/kg	50	ND
邻苯二甲酸二异丁酯(DIBP)	1000	mg/kg	50	ND

备注:

(1) 最大允许极限值引用自RoHS指令(EU) 2015/863。

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	<u>单位</u>	<u>MDL</u>	<u>003</u>
氟 (F)	mg/kg	50	ND
氯 (CI)	mg/kg	50	ND
溴 (Br)	mg/kg	50	ND
碘 (I)	mg/kg	50	ND



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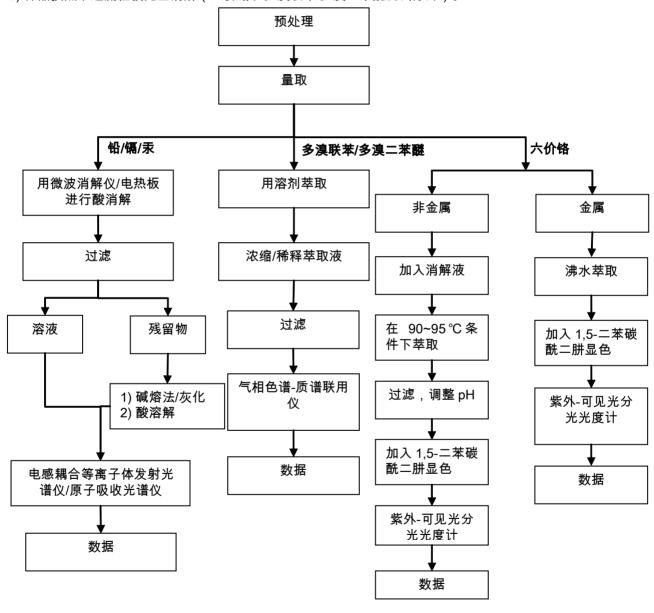
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附件

Pb/Cd/Hg/Cr6+/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/李清/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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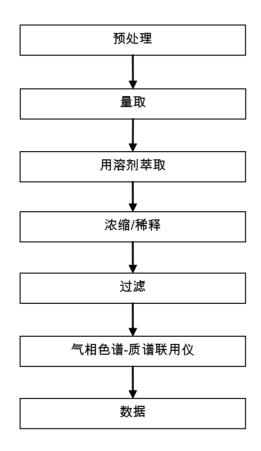
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附件

Phthalates 测试流程图

1) 分析人员:麦康志 2) 项目负责人: 李清





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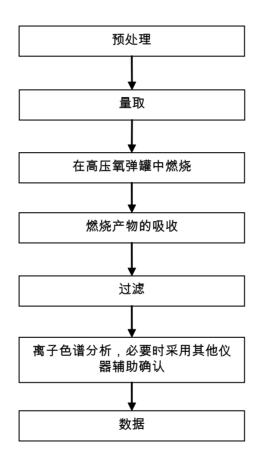
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附件

Halogen 测试流程图

1) 分析人员: 李龙飞 2) 项目负责人:周文凯





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