

No. SHAEC1619447402

日期: 2016年09月05日 第1页,共7页

常州丰盛光电科技股份有限公司 江苏常州新北区汉江路**406**号

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SGS工作编号:	SP16-031984 - SH
成分:	PMMA
型号:	FSEXN
样品接收日期:	2016年08月31日
测试周期:	2016年08月31日 - 2016年09月05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)、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。

通标标准技术服务(上海)有限公司 授权签名

Marry Ma马广媛 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	SHA16-194474.001	透明固体片

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 Ed.1.0 (111/321/CD),用GC-MS测定邻苯二甲酸酯的含量

测试项目	<u>限值</u>	<u>单位</u>	MDL	<u>001</u>
镉(Cd)	100	mg/kg	2	ND
铅(Pb)	1000	mg/kg	2	ND
汞(Hg)	1000	mg/kg	2	ND
六价铬 (CrVI)	1000	mg/kg	2	ND
多溴联苯之和(PBBs)	1000	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)	1000	mg/kg	-	ND
一溴二苯醚	-	mg/kg	5	ND



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测试项目	<u>限值</u>	<u>单位</u>	MDL	<u>001</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 。

(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DIBP。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。

<u> 卤素</u>

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>001</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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附件

RoHS 测试流程图

1) 分析人员: 陈玮卿/徐刚/李振/宋柯静

2) 项目负责人:施青/徐亮/黄婷/陈怀磊

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

分析人员:高仰景
项目负责人:黄婷





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附件

Halogen(氧弹法)测试流程图

1) 分析人员: 徐诚 2) 项目负责人: 印字





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