

No. SHAEC1206020004

日期: 2012年05月07日

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天水华天科技股份有限公司 甘肃省天水市秦州区双桥路**14**号

以下测试之样品是由申请者所提供及确认:SOP28L

SGS工作编号: SP12-011593 - SH

客户参考信息: SOP6L/SOP7L/SOP8L/ESOP8L/SOP14L/SOP16L/ESOP16L/SOP16 (W)/SO

P18L/SOP20L/SOP24L/SOP28L/SOP30L/HSOP28L/HSOP34L/MSOP8L/MSOP

10L/EMSOP8L/EMSOP10L

样品接收日期: 2012年04月23日

测试周期: 2012年04月23日 - 2012年05月04日

测试要求: 根据客户要求测试

测试方法: 请参见下一页 演参见下一页 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(PBB)、多溴二苯

醚(PBDE)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

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Fan Jingjie, JJ范晶捷

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批准签署人

本报告是发布日期为2012年05月07日编号为SHAEC1206020003 英文检测报告的中文译本。如有异议,以英文版本为准。

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测试结果:

### 测试样品描述:

样品编号	SGS样品ID	描述
1	SHA12-060200.002	黑色本体
2	SHA12-060200.005	银色金属

#### 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

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	<u>限值</u>	<u>单位</u>	<u>MDL</u>	<u>002</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

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<u>测试项目</u>	<u>限值</u>	<u>单位</u>	<u>MDL</u>	<u>002</u>	
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	
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.

### 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.

测试项目	<u>限值</u>	单位	<u>MDL</u>	<u>005</u>
镉 (Cd)	100	mg/kg	2	ND
铅(Pb)	1000	mg/kg	2	10
汞 (Hg)	1000	mg/kg	2	ND
六价铬(CrVI)	-	_	$\Diamond$	阴性

### 备注:

- (1) 最大允许极限值引用自指令2011/65/EU 附录II.
- (2) ◊ 点测试法:

阴性= 镀层中未检测到六价铬, 阳性 = 镀层中检测到六价铬;

(当点测试结果为阴性或无法确定时,将采用沸水萃取法作进一步的结果验证.)

◇ 沸水萃取法:

阴性 = 镀层中未检测到六价铬

阳性 = 镀层中检测到六价铬; 表明50 cm² 表面积的被测试样品的沸水萃取液中六价铬的浓度等于或大

#### 于0.02 mg/kg

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

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## 邻苯二甲酸盐(或酯)

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

测试项目	单位	<u>MDL</u>	<u>002</u>
邻苯二甲酸二丁酯(DBP)	%	0.003	ND
邻苯二甲酸丁苄酯 (BBP)	%	0.003	ND
邻苯二甲酸二(2-乙基己基) 酯 (DEHP)	%	0.003	ND
邻苯二甲酸二异壬酯 (DINP)	%	0.010	ND
邻苯二甲酸二正辛酯 (DNOP)	%	0.003	ND
邻苯二甲酸二异癸酯 (DIDP)	%	0.010	ND
邻苯二甲酸二正已酯(DnHP)	%	0.003	ND

#### 备注:

- (1) DBP, BBP, DEHP 参考信息: 1907/2006/EC Reach 附录XVII的修正指令——552/2009/EC 第51条 (前身为2005/84/EC) 的要求:
  - i) 不允许DBP, BBP, DEHP质量浓度高于0.1%的可塑性物料用于玩具和儿童护理品.
  - ii) 当玩具和儿童护理品中的可塑性物料含DBP, BBP, DEHP质量浓度高于0.1%时,不得投放市场. 详细信息请参见Regulation (EC) No 552/2009
  - DINP, DNOP, DIDP 参考信息: 1907/2006/EC Reach 附录XVII的修正指令——552/2009/EC 第52条 (前身为2005/84/EC) 的要求:
  - i) 不允许DINP, DNOP, DIDP 质量浓度高于0.1%的可塑性物料用于可放入儿童口中的玩具和儿童护理品.
  - ii) 当可放入儿童口中的玩具和儿童护理品中的可塑性物料含DINP, DNOP, DIDP 质量浓度高于0.1%时,不得投放市场.

详细信息请参见Regulation (EC) No 552/2009

# 全氟辛烷磺酰基化合物(PFOS)和全氟辛酸(PFOA)

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测试方法: 参照US EPA 3550C: 2007 方法测定, 采用HPLC-MS进行分析.

<u>测试项目</u>	<u>限值</u>	<u>单位</u>	<u>MDL</u>	<u>002</u>
全氟辛烷磺酰基化合物 (PFOS)- 酸,金属盐和酰胺	1000	mg/kg	10	ND
全氟辛酸 (PFOA)	-	mg/kg	10	ND

#### 备注:

最大允许限制引用自欧盟决议EU 757/2010(前身为1907/2006/EC REACH 附录XVII的修正指令-552/2009/EC第53条)详细信息请参见Regulation (EC) No 552/2009.

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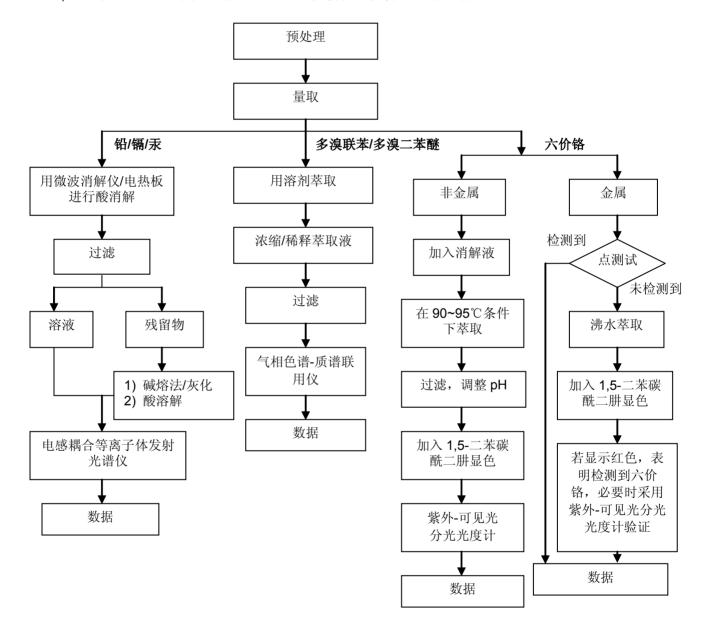
日期: 2012年05月07日

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附件

## RoHS 测试流程图

- 1) 分析人员: 施青/王彦青/肖飞/徐刚
- 2) 项目负责人: 张春华/徐亮/李丹
- 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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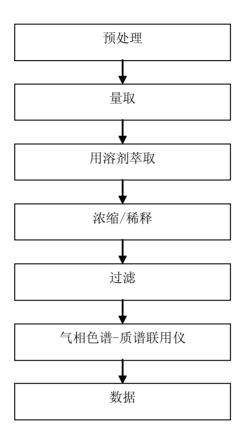


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# Phthalates 测试流程图

1) 分析人员: 姚霞飞2) 项目负责人: 张玉



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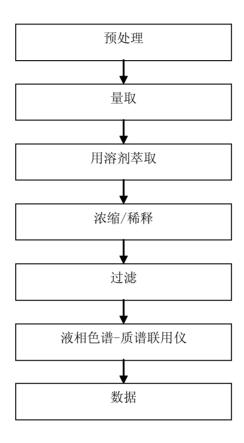


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## PFOS/PFOA 测试流程图

1) 分析人员: 李晓茹 2) 项目负责人: 李丹



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