

测试报告

No. SHAEC2003380814

日期: 2020年03月23日 第1页,共10页

上海友邦电气(集团)股份有限公司
上海市松江区佘山镇吉业路528号

以下测试之样品是由申请者所提供及确认: 汇流排

SGS工作编号: SP20-005516 - SH
型号: UP1-63/1P
客户参考信息: 见附页
样品接收日期: 2020年03月17日
测试周期: 2020年03月17日 - 2020年03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: 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-乙基己基)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

胡敏

Dora Hu 胡敏
批准签署人



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测试报告

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日期: 2020年03月23日 第2页,共10页

测试结果:

测试样品描述:

样品编号	SGS样品ID	描述
SN1	SHA20-033808.023	铜色金属
SN2	SHA20-033808.024	蓝色固体

备注:

- (1) 1 mg/kg = 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+AMD1:2017, IEC 62321-5:2013, IEC 62321-7-2:2017, IEC 62321-6:2015和IEC 62321-8:2017, 采用ICP-OES, UV-Vis和GC-MS进行分析。

测试项目	限值	单位	MDL	024
镉(Cd)	100	mg/kg	2	ND
铅(Pb)	1000	mg/kg	2	ND
汞(Hg)	1000	mg/kg	2	ND
六价铬 (Cr(VI))	1000	mg/kg	8	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
二溴二苯醚	-	mg/kg	5	ND
三溴二苯醚	-	mg/kg	5	ND



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测试项目	限值	单位	MDL	024
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。

IEC 62321系列等同于 EN 62321系列

https://www.cenelec.eu/dyn/www/f?p=104:30:1742232870351101:::FSP_ORG_ID,FSP_LANG_ID:1258637,25

(2) 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。

(3) DEHP, BBP, DBP 和 DIBP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, DBP 和 DIBP含量进行了限制。

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+AMD1:2017, IEC 62321-5:2013和IEC 62321-7-1:2015, 采用ICP-OES和UV-Vis进行分析。

测试项目	限值	单位	MDL	023
镉 (Cd)	100	mg/kg	2	ND
铅(Pb)	1000	mg/kg	2	244
汞 (Hg)	1000	mg/kg	2	ND
六价铬(Cr(VI))▼	-	µg/cm ²	0.10	ND

备注:

(1) 最大允许极限值引用自RoHS指令(EU) 2015/863。

IEC 62321系列等同于 EN 62321系列

https://www.cenelec.eu/dyn/www/f?p=104:30:1742232870351101:::FSP_ORG_ID,FSP_LANG_ID:1258637,25

(2) ▼ = a. 当六价铬的浓度高于0.13 µg/cm²时, 样品为阳性, 即含有六价铬;

b. 当六价铬的浓度为ND(低于0.10 µg/cm²)时, 样品为阴性, 即未检测到六价铬;



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c. 当六价铬的浓度介于 $0.10 \mu\text{g}/\text{cm}^2$ 与 $0.13 \mu\text{g}/\text{cm}^2$ 之间时, 无法直接判定是否检测到六价铬, 因不同个体的样品表面差异可能会影响测定结果;

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能代表测试时样品含六价铬的状态。

除非另有说明, 此报告结果仅对测试的样品负责。本报告未经本公司书面许可, 不可部分复制。

检测报告仅用于客户科研、教学、内部质量控制、产品研发等目的, 仅供内部参考。



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附页

UP1-41/1P、UP1-41/2P、UP1-41/3P、UP1-63/1P、UP1-63/2P、UP1-63/3P、UP1-63B/1P、UP1-63B/2P、UP1-63B/3P、UP1-80/1P、UP1-80/2P、UP1-80/3P、UP1-100/1P、UP1-100/2P、UP1-100/3P、UP1-100B/1P、UP1-100B/2P、UP1-100B/3P、UP1-100C/1P、UP1-100C/2P、UP1-100C/3P、UP1-125/1P、UP1-125/2P、UP1-125/3P、UP1-41/1PX、UP1-63/1PX、UP1-100/1PX、UP1-100/1PXT、UP2-41/1P、UP2-41/2P、UP2-41/3P、UP2-41/4P、UP2-63/1P、UP2-63/2P、UP2-63/3P、UP2-63/4P、UP2-63B/1P、UP2-63B/2P、UP2-63B/3P、UP2-63B/4P、UP2-100/1P、UP2-100/2P、UP2-100/3P、UP2-100/4P、UP4-41/1P、UP4-41/2P、UP4-41/3P、UP4-41/4P、UP4-41B/1P、UP4-41B/2P、UP4-41B/3P、UP4-41B/4P、UP4-63/1P、UP4-63/2P、UP4-63/3P、UP4-63/4P、UP4-63B/1P、UP4-63B/2P、UP4-63B/3P、UP4-63B/4P、UP4-100/1P、UP4-100/2P、UP4-100/3P、UP4-100/4P、UP4-100B/1P、UP4-100B/2P、UP4-100B/3P、UP4-100B/4P、UP4-100C/1P、UP4-100C/2P、UP4-100C/3P、UP4-100C/4P、UP5-41/2P、UP5-41/2PT、UP5-41/2P (GD)、UP4-63JH2、UP4-41BJH2、UP4-63JH3、UP4-63JH、UP2-100Y/JH、UP1-63JH、UP1-41JH、UP1-41JH/63JH1、UP1-41JH/63JH2、UP4-63/100CJH、UP1-100JH、UP4-41JH、UP5-41AJH、UP5-41BJH、UP4-63/1PG、UP1-41GZ、UP1-41GY、UP1-63G、UP1-125JH



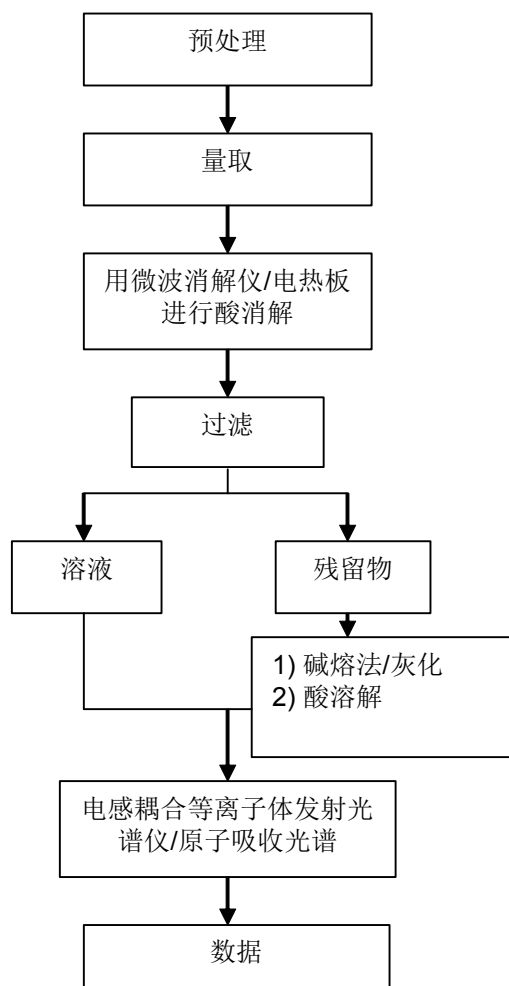
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元素(IEC62321) 测试流程图

1)样品按照下述流程被完全消解

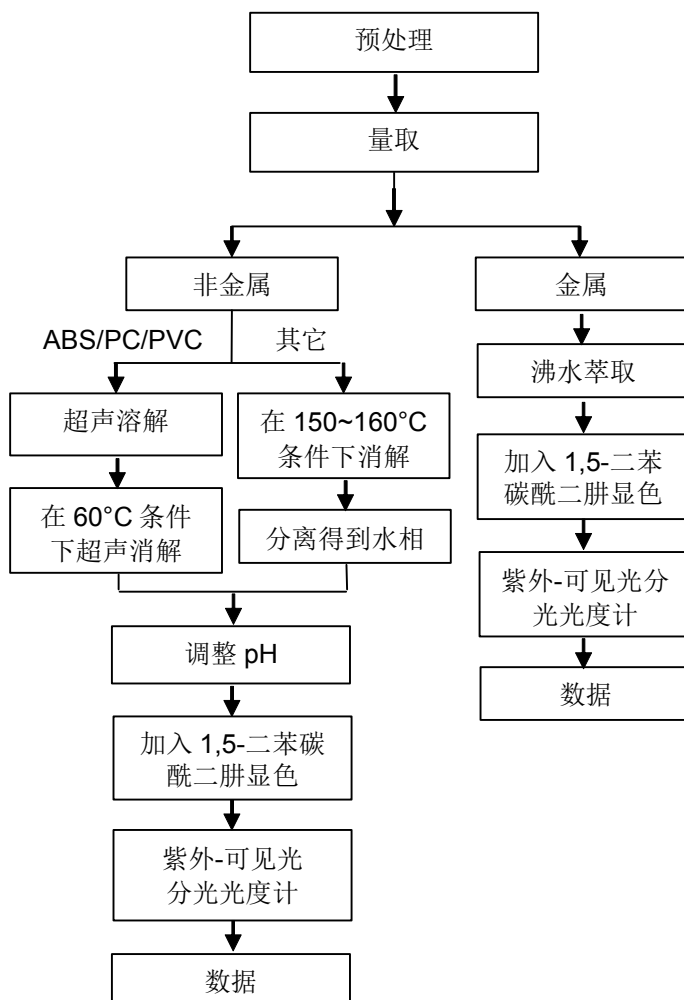


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六价铬测试流程图

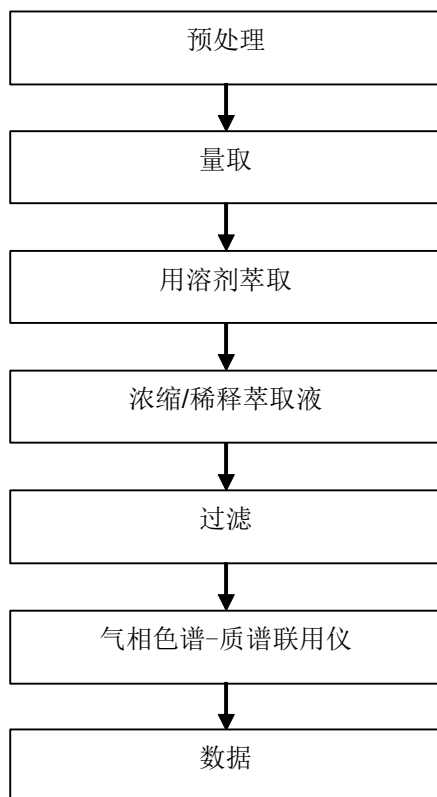


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PBBs/PBDEs 测试流程图

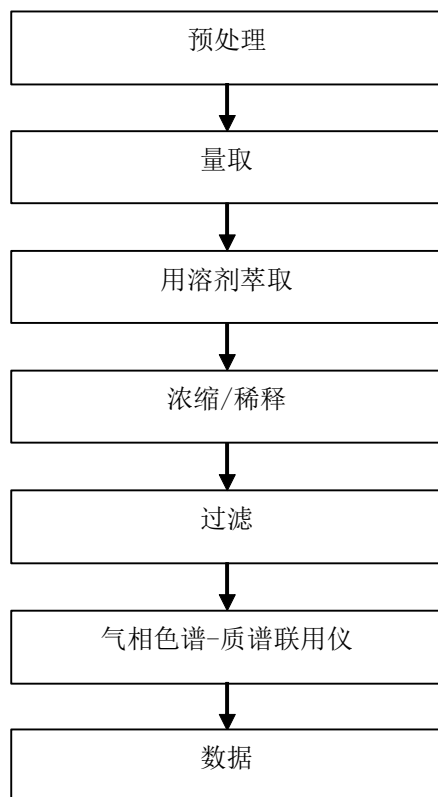


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Phthalates 测试流程图



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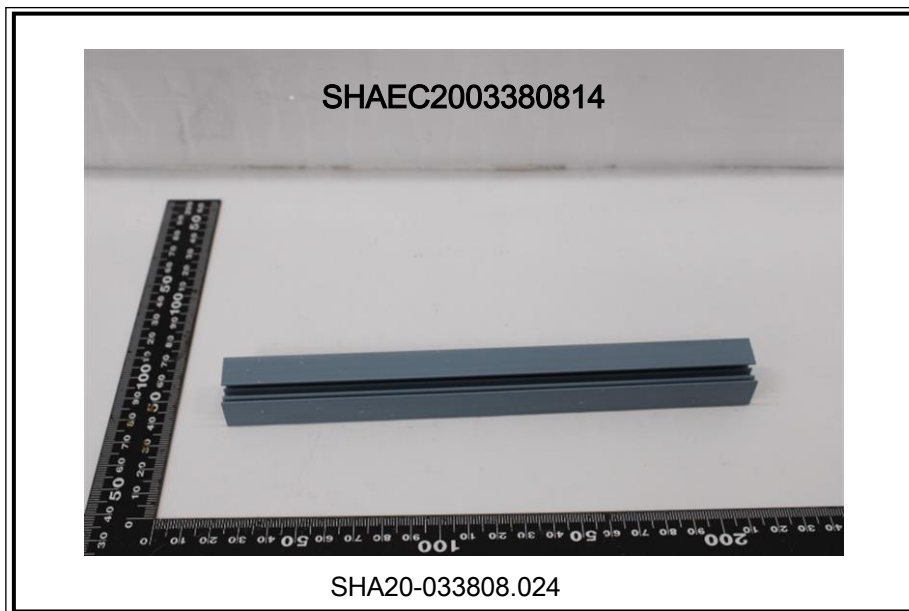
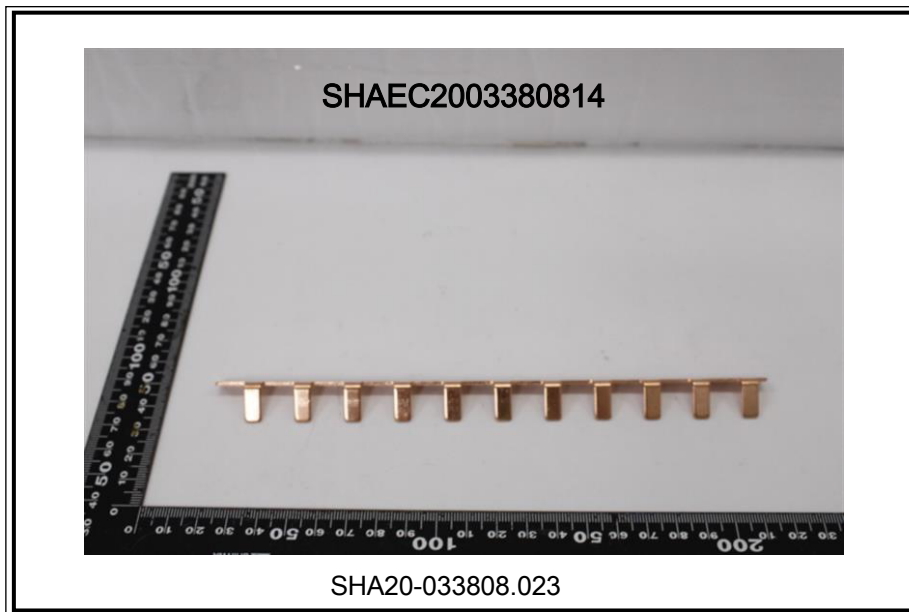
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