

测试报告

No. CANEC2004503706

日期: 2020年04月13日 第1页,共9页

深圳市福安达电工材料有限公司

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重庆市北碚区云汉大道315号2单元2-1

以下测试之样品是由申请者所提供及确认: 黑色PC

SGS工作编号: CP20-013473 - SZ

型号: FBPC-375

客户参考信息: 用于FBPC系列、FPC系列、FBPC系列、FBPC-100、FBPC-125、
FBPC-150、FBPC-1000、FBPC-1500、FBPC-150ESD2、FBPC-175、
FBPC-200、FBPC-250、FBPC-250ESD2、FBPC-375、FBPC-380、
FBPC-430、FBPC-50、FBPC-500、FBPC-600、FBPC-75、FBPC-760、
FBPC-250ESD2-1

样品接收日期: 2020年04月07日

测试周期: 2020年04月07日 - 2020年04月13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)、邻苯二甲酸丁苯酯(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。

通标标准技术服务有限公司广州分公司

授权签名

史丽兰

Violet, Shi 史丽兰

批准签署人



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Guangzhou 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	CAN20-045037.003	黑色片状物

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: 参考IEC 62321-4:2013+A1:2017, 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	003
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	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
五溴二苯醚	-	mg/kg	5	ND



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测试项目	限值	单位	MDL	003
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)	1,000	mg/kg	50	ND
邻苯二甲酸丁苄酯(BBP)	1,000	mg/kg	50	ND
邻苯二甲酸二(2-乙基己基)酯(DEHP)	1,000	mg/kg	50	ND
邻苯二甲酸二异丁酯(DIBP)	1,000	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。

卤素

测试方法: 参考EN 14582:2016, 用 IC分析。

测试项目	限值	单位	MDL	003
氟 (F)	-	mg/kg	50	1927
氯 (Cl)	900	mg/kg	50	ND
溴 (Br)	900	mg/kg	50	ND
碘 (I)	-	mg/kg	50	ND
评论				符合

备注:

- (1) Br + Cl < 1500mg/kg.
- (2) 限值由客户提供。

元素分析

测试方法: SGS内部方法 (GZTC CHEM-TOP-004-01, 参考EPA 3052: 1996), 采用ICP-OES进行分析。



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测试项目	单位	MDL	003
锑 (Sb)	mg/kg	10	ND
三氧化二锑 Sb_2O_3	mg/kg	12	ND

备注:

(1) 三氧化二锑(Sb_2O_3): 由锑含量换算得之。

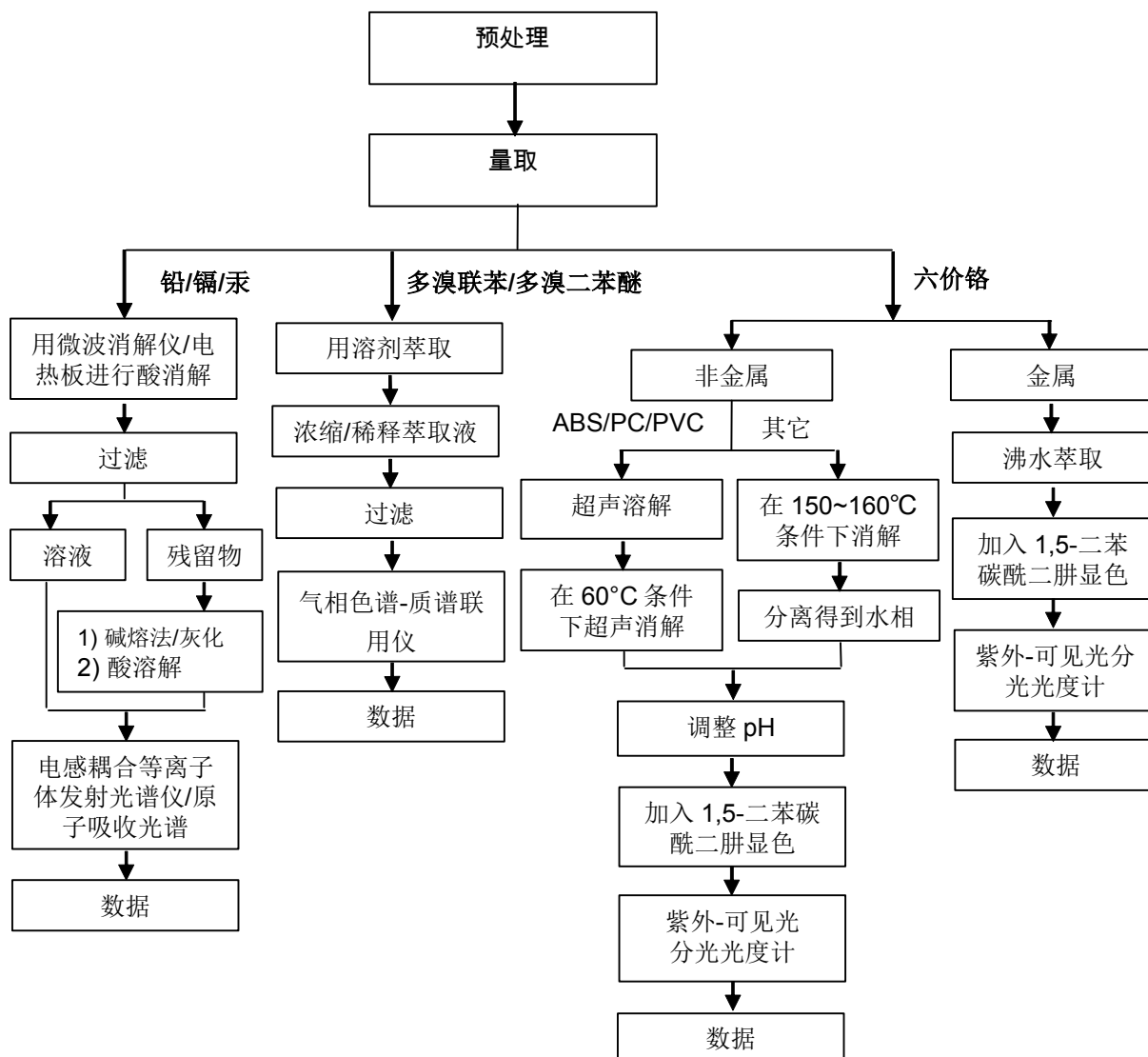
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检测报告仅用于客户科研、教学、内部质量控制、产品研发等目的, 仅供内部参考。



附件

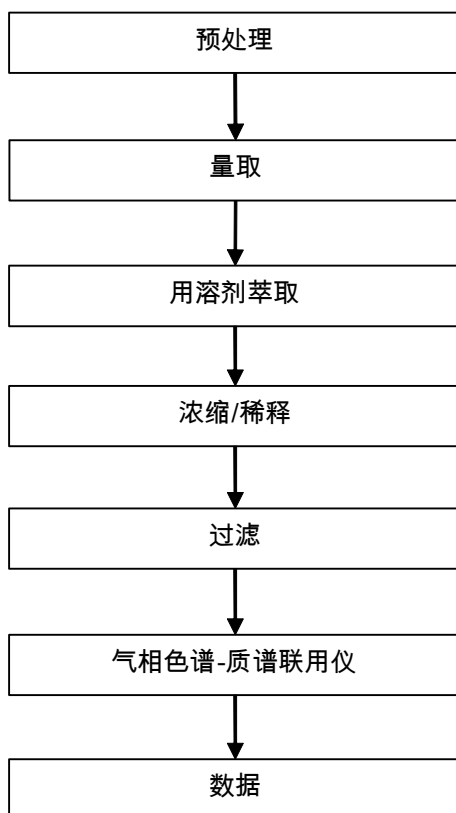
Pb/Cd/Hg/Cr⁶⁺/PBBs/PBDEs 测试流程图

1) 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)。



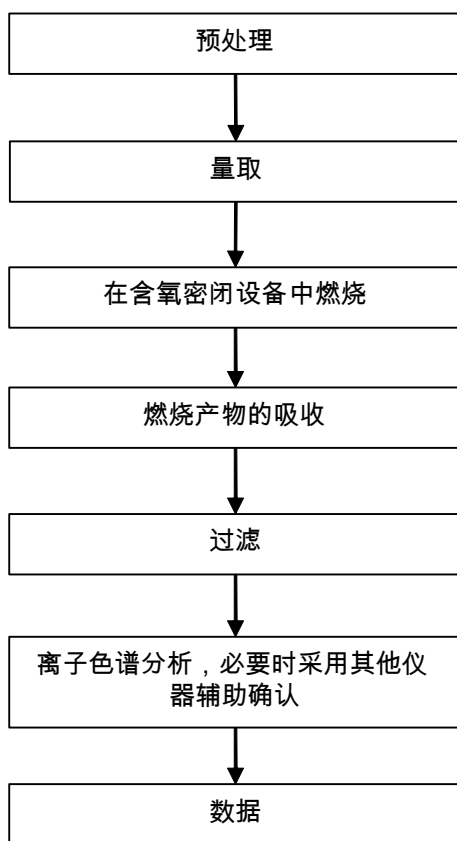
附件

Phthalates 测试流程图



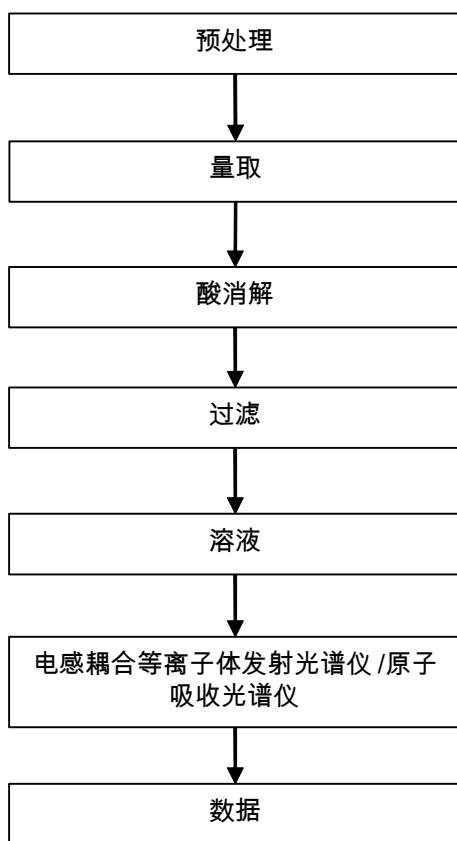
附件

Halogen 测试流程图



附件

元素测试流程图



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样品照片:



此照片仅限于随SGS正本报告使用

*** 报告完 ***



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