

测试报告

No. SHAEC2100724506

日期: 2022年12月25日 第1页,共10页

广州玉隆化工有限公司

广州市花都区新华工业园

以下测试之样品是由申请者所提供及确认: 酞菁蓝

SGS工作编号: SP21-000987 - SH

型号: PB15:3

批号: 886B2012198

样品接收日期: 2022年12月12日

测试周期: 2022年12月12日 - 2022年12月22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。

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授权签名

刘海鹏

Helen Liu 刘海鹏
批准签署人

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SHAEC2100724506



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测试报告

No. SHAEC2100724506

日期: 2022 年 12 月 25 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	SHA21-007245.003	蓝色粉末

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+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	003
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
四溴二苯醚	-	mg/kg	5	ND



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测试项目	限值	单位	MDL	003
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。

欧盟玩具指令2009/48/EC及其修订指令(EU) 2019/1728之协调标准 EN 71-3:2019—特定元素迁移测试(针对第一类:干燥、易碎、粉状或易弯曲的玩具材料)

测试方法: 参照EN 71-3:2019, 采用ICP-MS, IC-UV 或LC-ICP-MS进行分析。

测试项目	限值	单位	MDL	003
可溶性六价铬(CrVI)	0.020	mg/kg	0.010	ND
可溶性铅(Pb)	2	mg/kg	0.5	ND
可溶性锑(Sb)	45	mg/kg	1	ND
可溶性砷(As)	3.8	mg/kg	0.5	ND
可溶性钡(Ba)	1500	mg/kg	50	ND
可溶性镉(Cd)	1.3	mg/kg	0.1	ND
可溶性三价铬(CrIII)	37.5	mg/kg	5	ND
可溶性汞(Hg)	7.5	mg/kg	0.5	ND
可溶性硒(Se)	37.5	mg/kg	5	ND
可溶性硼(B)	1200	mg/kg	50	ND
可溶性钴(Co)	10.5	mg/kg	0.5	ND
可溶性锰(Mn)	1200	mg/kg	50	ND
可溶性锶(Sr)	4500	mg/kg	50	ND



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测试项目	限值	单位	MDL	003
可溶性锌 (Zn)	3750	mg/kg	50	ND
可溶性铜 (Cu)	622.5	mg/kg	50	475
可溶性铝 (Al)	5625	mg/kg	50	ND
可溶性镍 (Ni)	75	mg/kg	10	ND
可溶性锡 (Sn)	15000	mg/kg	0.15	ND
可溶性有机锡*	0.9	mg/kg	-	ND

备注:

(1) *可溶性锡转化为可溶性有机锡后的含量没有超过EN 71-3:2019 中相应限量, 根据EN 71-3:2019的要求, 不需要额外测试可溶性有机锡的含量。

多氯联苯(PCBs)*

测试方法: 参照US EPA 8082A: 2007 方法测定, 采用GC-MS进行分析.

测试项目	CAS NO.	单位	MDL	003
2,4,4'-三氯联苯 (PCB 28)	7012-37-5	mg/kg	0.5	ND
2,2',5,5'-四氯联苯 (PCB 52)	35693-99-3	mg/kg	0.5	ND
2,2',4,5,5'-五氯联苯(PCB 101)	37680-73-2	mg/kg	0.5	ND
2,3',4,4',5-五氯联苯(PCB 118)	31508-00-6	mg/kg	0.5	ND
2,2',3,4,4',5'-六氯联苯 (PCB 138)	35065-28-2	mg/kg	0.5	ND
2,2',4,4',5,5'-六氯联苯 (PCB 153)	35065-27-1	mg/kg	0.5	ND
2,2',3,4,4',5,5'-七氯联苯 (PCB 180)	35065-29-3	mg/kg	0.5	ND

备注:

报告中标注"***"的项目不在我方实验室CNAS认证认可范围内。

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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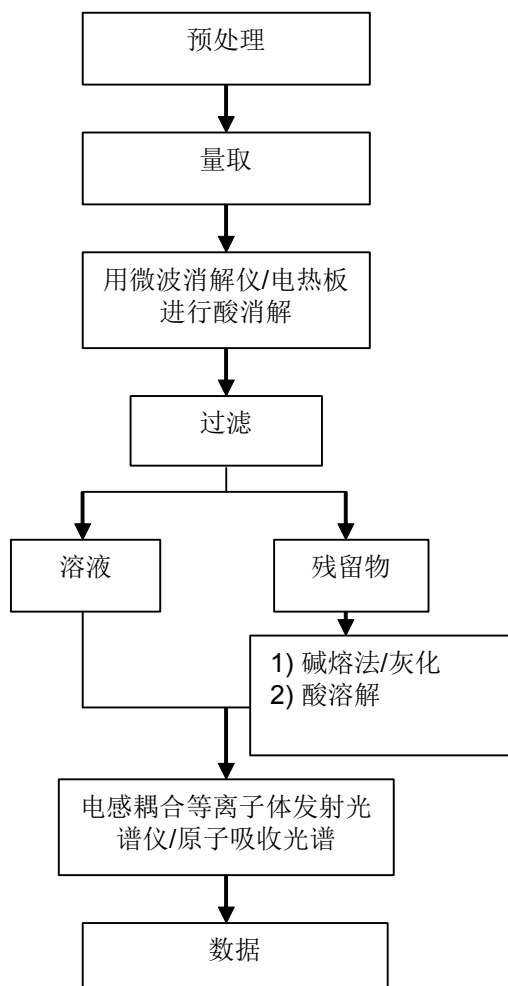
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元素(IEC62321) 测试流程图

1) 样品按照下述流程被完全消解



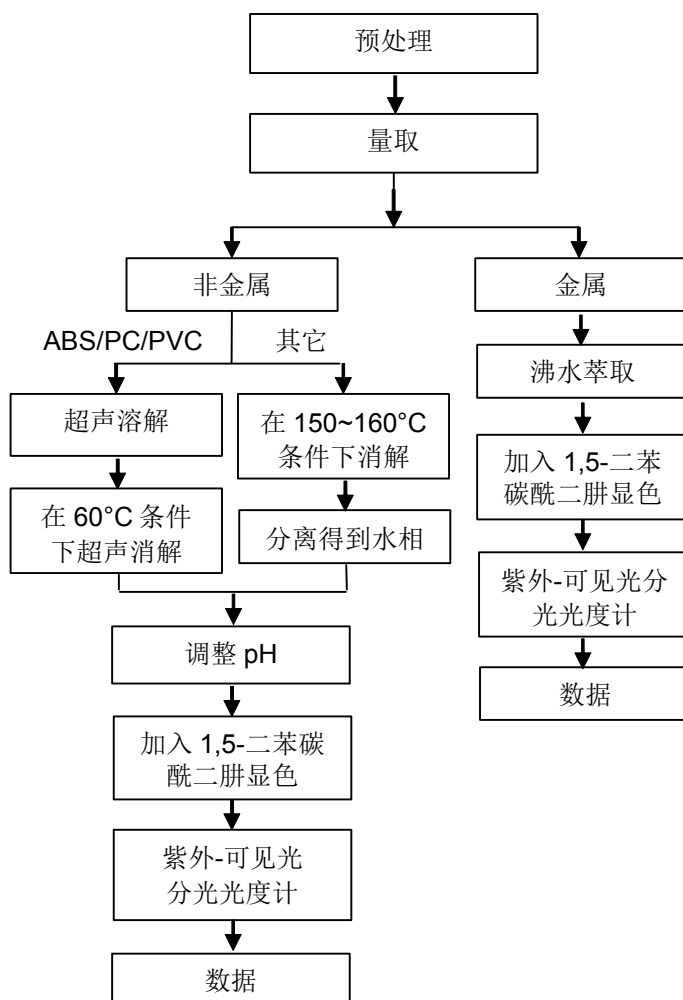
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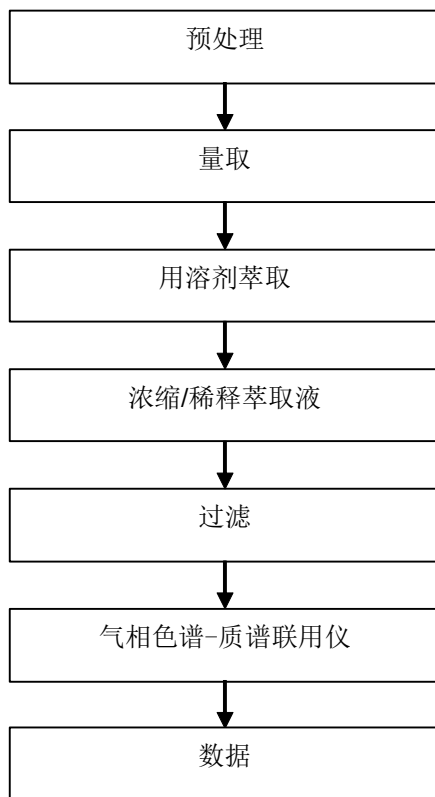
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六价铬测试流程图



PBBs/PBDEs 测试流程图



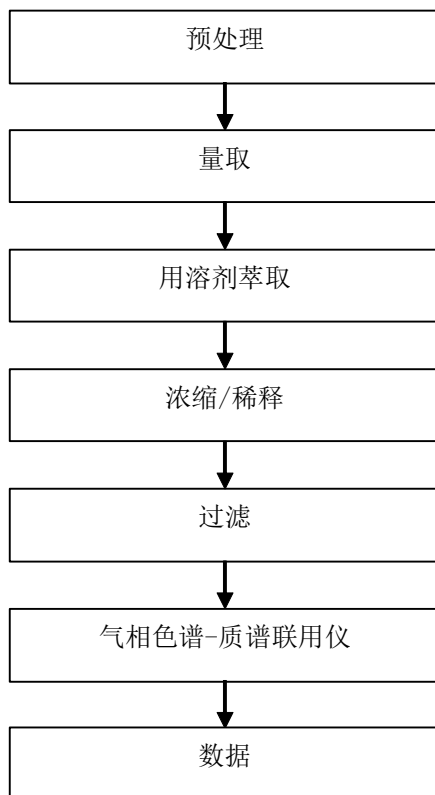
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Phthalates 测试流程图



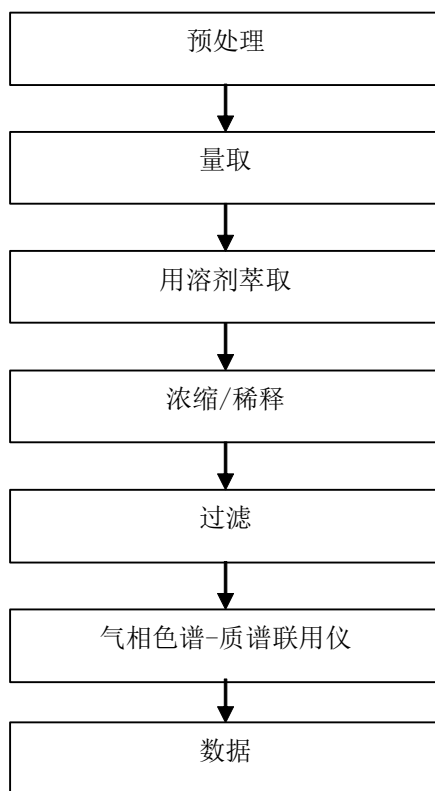
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PCB 测试流程图



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