

No. SHAEC2201088702

日期: 2022年01月20日 第1页,共8页

苏州南达金属科技有限公司 江苏省吴江市七都镇桔园路88号

以下测试之样品是由申请者所提供及确认:铜包铝线

SGS工作编号: SP22-001557 - SH

型号: CCA-2.05mm

样品接收日期: 2022年01月17日

测试周期: 2022年01月17日 - 2022年01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

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 结论:

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

Tom Ni倪俊 批准签署人





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测试报告 No. SHAEC2201088702 日期: 2022年01月20日 第2页,共8页

测试结果:

测试样品描述:

样品编号 SGS样品ID 描述 SN1 SHA22-010887.001 铜色金属

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 62321-7-1:2015, IEC 62321-6:2015和IEC 62321-8:2017, 采用ICP-OES, AAS, UV-Vis和GC-MS进行分析。

| 测试项目 | <u>限值</u> | <u>单位</u> | <u>MDL</u> | <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(Cr(VI))▼ | - | µg/cm² | 0.10 | 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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| <u>测试项目</u> | 限值 | <u>单位</u> | <u>MDL</u> | <u>001</u> |
|-----------------------|------|-----------|------------|------------|
| 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:12586

- (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;
- c. 当六价铬的浓度介于0.10 μg/cm²与0.13 μg/cm²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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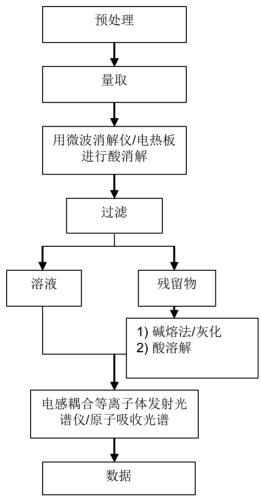
No. SHAEC2201088702

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附件

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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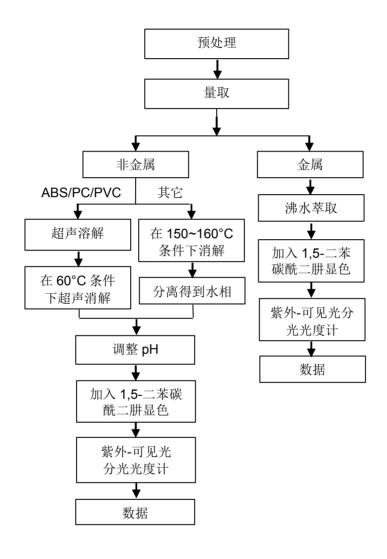


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附件

六价铬测试流程图





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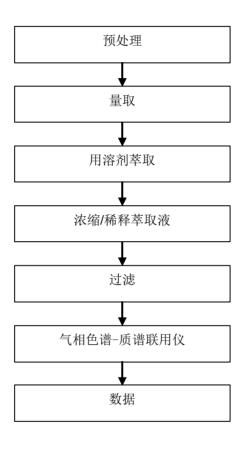


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附件

PBBs/PBDEs 测试流程图





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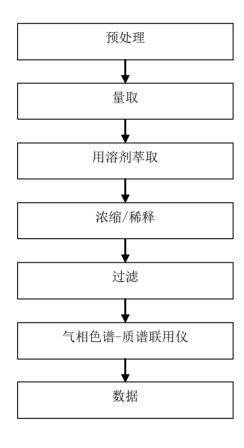


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Phthalates 测试流程图





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