

检测报告
Test Report报告编号 A2230329123101003E
Report No. A2230329123101003E第 1 页 共 9 页
Page 1 of 9报告抬头公司名称 光路新能源科技（江苏）有限公司
Company Name LUSUN TECHNOLOGY (JIANGSU) CO.,LTD.
shown on Report
地 址 江苏省苏州市昆山市千灯镇淞南东路2号
Address NO.2 SONGNAN ROAD (E) QIANDENG TOWN KUNSHAN SUZHOU JIANGSU以下测试之样品及样品信息由申请者提供并确认
The following sample(s) and sample information was/were submitted and identified by/on the behalf of the applicant样品名称 导线
Sample Name Lead wire
样品型号 导线
Part No. Lead wire
材料名称 无氧铜
Material Oxygen Free Copper
样品接收日期 2023.07.06
Sample Received Date Jul. 6, 2023
样品检测日期 2023.07.06-2023.07.11
Testing Period Jul. 6, 2023 to Jul. 11, 2023

检测要求 根据客户要求，对所提交样品中的铅(Pb)，镉(Cd)，汞(Hg)，六价铬(Cr(VI))，多溴联苯(PBBs)，多溴二苯醚(PBDEs)，邻苯二甲酸酯(DBP, BBP, DEHP, DIBP)，铍(Be)，锑(Sb)，六溴环十二烷(HBCDD)，氟(F)，氯(Cl)，溴(Br)，碘(I)进行测试。

Test Requested As specified by client, to test Lead (Pb), Cadmium (Cd), Mercury (Hg), Hexavalent Chromium (Cr(VI)), Polybrominated Biphenyls (PBBs), Polybrominated Diphenyl Ethers (PBDEs), Phthalates (DBP, BBP, DEHP, DIBP), Beryllium(Be), Antimony(Sb), Hexabromocyclododecane (HBCDD), Fluorine (F), Chlorine (Cl), Bromine (Br), Iodine (I) in the submitted sample(s).

检测依据/检测结果 请参见下页。
Test Method/Test Result(s) Please refer to the following page(s).批
Approved by

陈凯敏
实验室经理 Lab Manager日 期
Date 2023.07.11

No. R268859558

上海华测品标检测技术有限公司
Centre Testing International Pinbiao(Shanghai) Co., Ltd.上海市闵行区万芳路1351号
No.1351, Wanfang Road, Minhang District, Shanghai, China

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检测依据 Test Method

| 测试项目 Test Item(s) | 测试方法 Test Method | 测试仪器 Measured Equipment(s) |
|---|---|----------------------------------|
| 铅 Lead (Pb) | IEC 62321-5:2013 | ICP-OES |
| 镉 Cadmium (Cd) | IEC 62321-5:2013 | ICP-OES |
| 汞 Mercury (Hg) | IEC 62321-4:2013+AMD1:2017 CSV | ICP-OES |
| 六价铬 Hexavalent Chromium (Cr(VI)) | IEC 62321-7-1:2015 | UV-Vis |
| 多溴联苯 Polybrominated Biphenyls (PBBs) | IEC 62321-6:2015 | GC-MS |
| 多溴二苯醚 Polybrominated Diphenyl Ethers (PBDEs) | IEC 62321-6:2015 | GC-MS |
| 邻苯二甲酸酯 Phthalates (DBP, BBP, DEHP, DIBP) | IEC 62321-8:2017 | GC-MS |
| 铍 Beryllium(Be) | 参考US EPA 3050B:1996 & US EPA 6010D:2018 * Refer to US EPA 3050B:1996 & US EPA 6010D:2018 * | ICP-OES |
| 锑 Antimony(Sb) | 参考US EPA 3050B:1996 & US EPA 6010D:2018 * Refer to US EPA 3050B:1996 & US EPA 6010D:2018 * | ICP-OES |
| 六溴环十二烷 Hexabromocyclododecane (HBCDD) | IEC 62321-9:2021 | GC-MS |
| 氟 Fluorine (F) | 参考EN 14582:2016 Refer to EN 14582:2016 | IC |
| 氯 Chlorine (Cl) | 参考EN 14582:2016 Refer to EN 14582:2016 | IC |
| 溴 Bromine (Br) | 参考EN 14582:2016 Refer to EN 14582:2016 | IC |
| 碘 Iodine (I) | 参考EN 14582:2016 Refer to EN 14582:2016 | IC |

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检测结果 Test Result(s)

| 测试项目 Tested Item(s) | 结果 Result | 方法检出限 MDL |
|---|-----------|-------------------------------|
| | 003 | |
| 铅 Lead (Pb) | N.D. | 2 mg/kg |
| 镉 Cadmium (Cd) | N.D. | 2 mg/kg |
| 汞 Mercury (Hg) | N.D. | 2 mg/kg |
| 六价铬 Hexavalent Chromium (Cr(VI)) | N.D. ▼ | 0.10 µg/cm ² (LOQ) |
| 测试项目 Tested Item(s) | 结果 Result | 方法检出限 MDL |
| | 003 | |
| 多溴联苯 Polybrominated Biphenyls (PBBs) | | |
| 一溴联苯 Monobromobiphenyl | N.D. | 5 mg/kg |
| 二溴联苯 Dibromobiphenyl | N.D. | 5 mg/kg |
| 三溴联苯 Tribromobiphenyl | N.D. | 5 mg/kg |
| 四溴联苯 Tetrabromobiphenyl | N.D. | 5 mg/kg |
| 五溴联苯 Pentabromobiphenyl | N.D. | 5 mg/kg |
| 六溴联苯 Hexabromobiphenyl | N.D. | 5 mg/kg |
| 七溴联苯 Heptabromobiphenyl | N.D. | 5 mg/kg |
| 八溴联苯 Octabromobiphenyl | N.D. | 5 mg/kg |
| 九溴联苯 Nonabromobiphenyl | N.D. | 5 mg/kg |
| 十溴联苯 Decabromobiphenyl | N.D. | 5 mg/kg |
| 测试项目 Tested Item(s) | 结果 Result | 方法检出限 MDL |
| | 003 | |
| 多溴二苯醚 Polybrominated Diphenyl Ethers (PBDEs) | | |
| 一溴二苯醚 Monobromodiphenyl ether | N.D. | 5 mg/kg |
| 二溴二苯醚 Dibromodiphenyl ether | N.D. | 5 mg/kg |
| 三溴二苯醚 Tribromodiphenyl ether | N.D. | 5 mg/kg |
| 四溴二苯醚 Tetrabromodiphenyl ether | N.D. | 5 mg/kg |
| 五溴二苯醚 Pentabromodiphenyl ether | N.D. | 5 mg/kg |
| 六溴二苯醚 Hexabromodiphenyl ether | N.D. | 5 mg/kg |
| 七溴二苯醚 Heptabromodiphenyl ether | N.D. | 5 mg/kg |
| 八溴二苯醚 Octabromodiphenyl ether | N.D. | 5 mg/kg |
| 九溴二苯醚 Nonabromodiphenyl ether | N.D. | 5 mg/kg |
| 十溴二苯醚 Decabromodiphenyl ether | N.D. | 5 mg/kg |

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检测结果 Test Result(s)

| 测试项目 Tested Item(s) | 结果 Result | 方法检出限 MDL |
|--|-----------|-----------|
| | 003 | |
| 邻苯二甲酸酯 Phthalates (DBP, BBP, DEHP, DIBP) | | |
| 邻苯二甲酸二丁酯 Dibutyl phthalate (DBP) CAS#:84-74-2 | N.D. | 50 mg/kg |
| 邻苯二甲酸丁基苄基酯 Butyl benzyl phthalate (BBP) CAS#:85-68-7 | N.D. | 50 mg/kg |
| 邻苯二甲酸二(2-乙基)己酯 Di-(2-ethylhexyl) phthalate (DEHP) CAS#:117-81-7 | N.D. | 50 mg/kg |
| 邻苯二甲酸二异丁酯 Diisobutyl phthalate (DIBP) CAS#:84-69-5 | N.D. | 50 mg/kg |
| 测试项目 Tested Item(s) | 结果 Result | 方法检出限 MDL |
| | 003 | |
| 铍 Beryllium (Be) | N.D. | 10 mg/kg |
| 锑 Antimony (Sb) | N.D. | 10 mg/kg |
| 测试项目 Tested Item(s) | 结果 Result | 方法检出限 MDL |
| | 003 | |
| 六溴环十二烷 Hexabromocyclododecane (HBCDD) | N.D. | 20 mg/kg |
| 测试项目 Tested Item(s) | 结果 Result | 方法检出限 MDL |
| | 003 | |
| 氟 Fluorine (F) | N.D. | 10 mg/kg |
| 氯 Chlorine (Cl) | N.D. | 10 mg/kg |
| 溴 Bromine (Br) | N.D. | 10 mg/kg |
| 碘 Iodine (I) | N.D. | 10 mg/kg |

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样品/部位描述 Sample/Part Description

| 序号 No. | CTI样品ID CTI Sample ID | 描述 Description |
|-----------|--------------------------|------------------------|
| 1 | 003 | 铜色金属 Cupreous metal |

备注: 对于检测铅, 镉, 汞, 铍, 锑之样品已消解完全。

-N.D. = 未检出 (小于方法检出限或定量限)

-mg/kg = ppm = 百万分之一

-LOQ = 定量限, 六价铬的定量限为0.10 $\mu\text{g}/\text{cm}^2$ - ∇ 六价铬浓度小于0.10 $\mu\text{g}/\text{cm}^2$, 样品未检出六价铬。**Remark:** **The sample(s) had been dissolved totally tested for Lead, Cadmium, Mercury, Beryllium, Antimony.**

-MDL = Method Detection Limit

-N.D. = Not Detected (<MDL or LOQ)

-mg/kg = ppm = parts per million

-LOQ = Limit of Quantification, The LOQ of Hexavalent chromium is 0.10 $\mu\text{g}/\text{cm}^2$ - ∇ The sample is negative for Cr(VI) – The Cr(VI) concentration is below 0.10 $\mu\text{g}/\text{cm}^2$. The coating is considered a non-Cr(VI) based coating.**注释:** 本报告中的数据结果供科研、教学、企业内部质量控制、企业产品研发等目的用。

“*”表示该方法不在CNAS认可范围内。

Note: **The testing data and result(s) in this report is(are) just for scientific research, education, internal quality control and product development etc.**

“*” indicates the method(s) is (are) not in CNAS accreditation scope.

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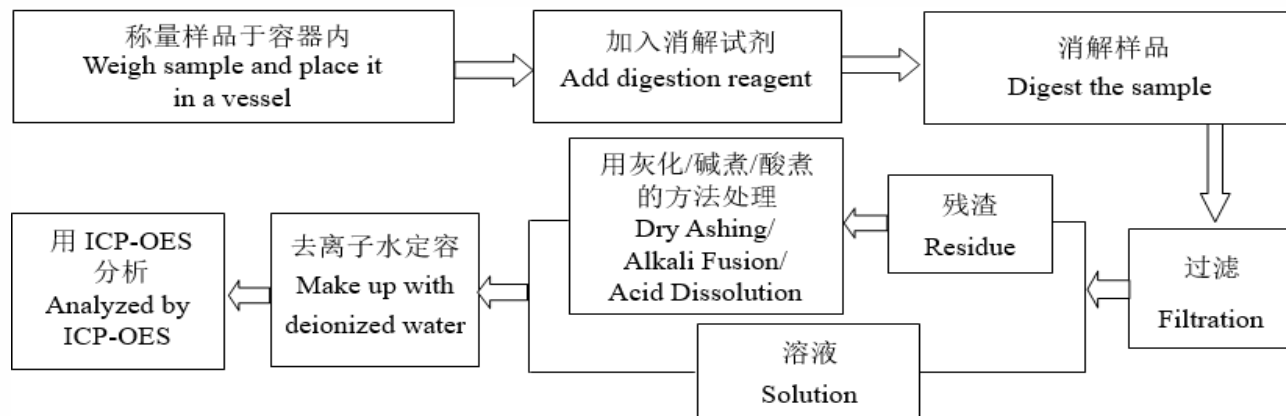
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检测流程 Test Process

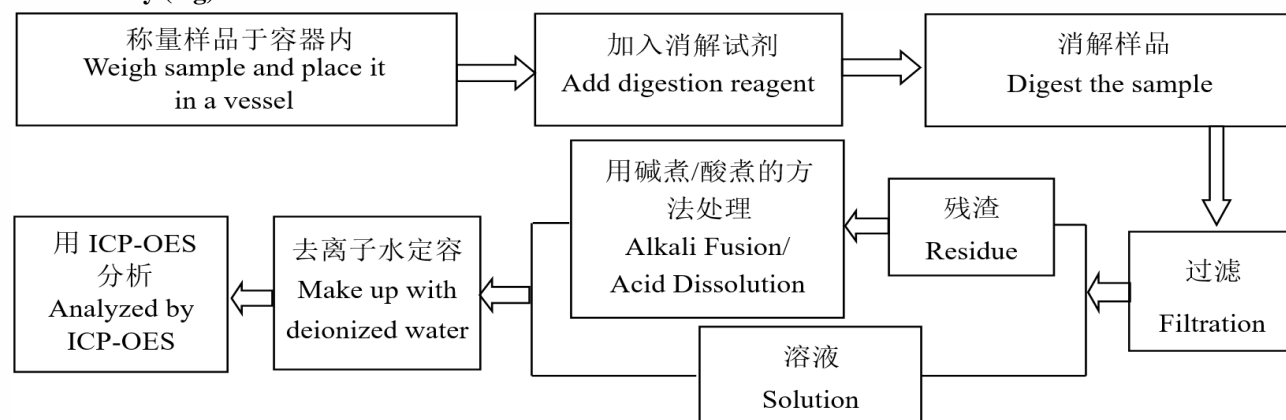
1. 铅(Pb), 镉(Cd)

Lead (Pb), Cadmium (Cd)



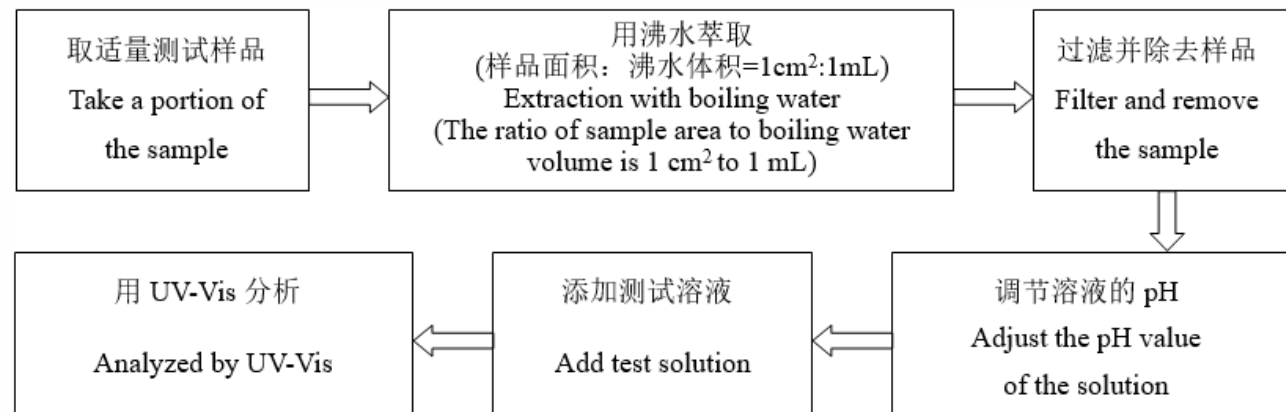
2. 汞(Hg)

Mercury (Hg)



3. 六价铬(Cr(VI))

Hexavalent Chromium (Cr(VI))



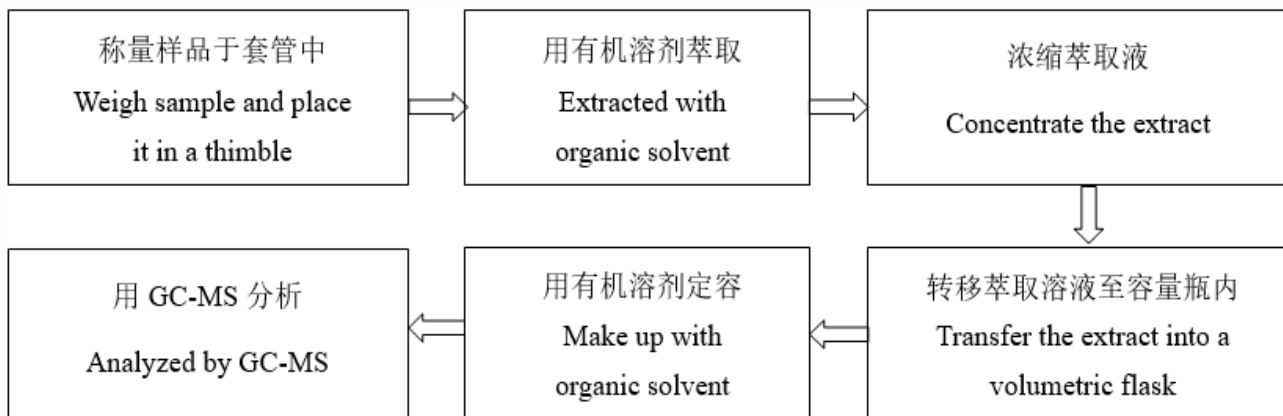
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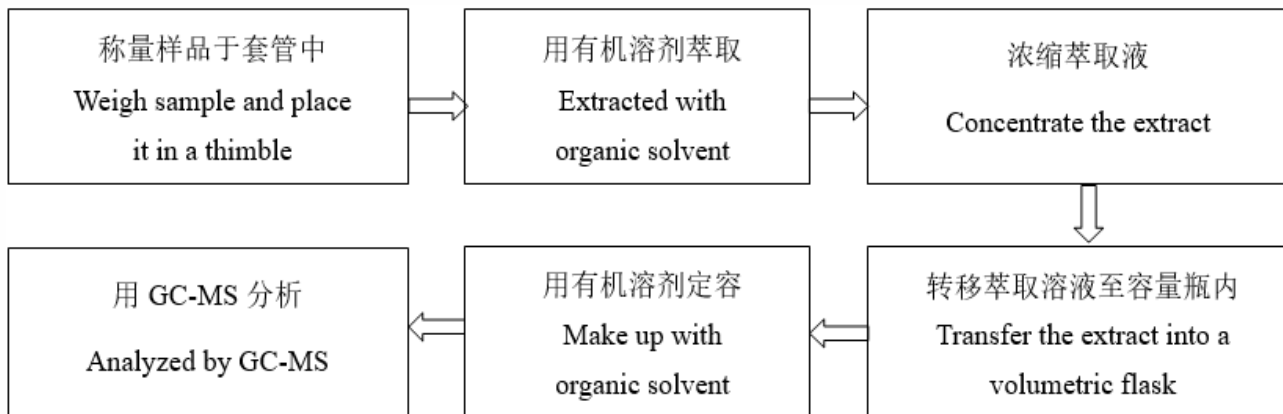
4. 多溴联苯(PBBs), 多溴二苯醚(PBDEs)

Polybrominated Biphenyls (PBBs), Polybrominated Diphenyl Ethers (PBDEs)



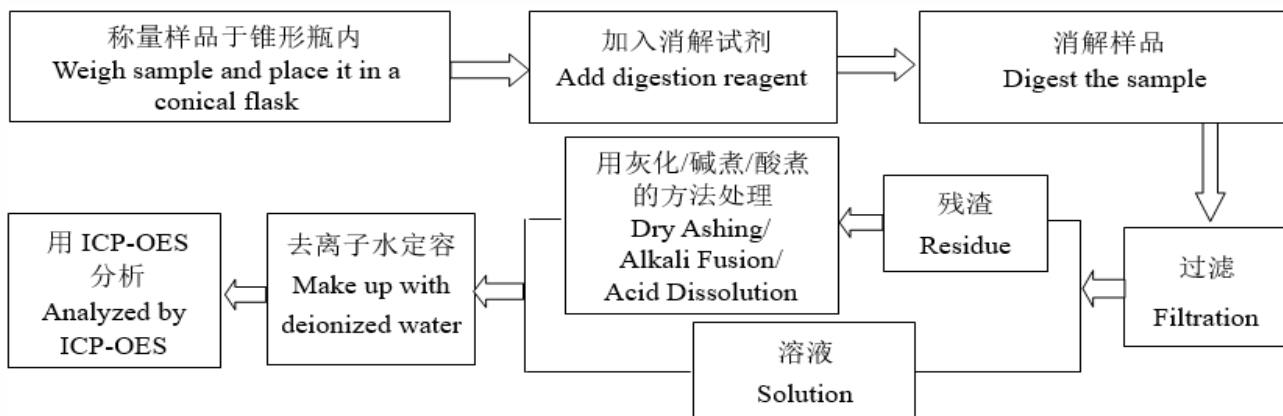
5. 邻苯二甲酸酯(DBP, BBP, DEHP, DIBP)

Phthalates (DBP, BBP, DEHP, DIBP)



6. 铍(Be), 锑(Sb)

Beryllium(Be), Antimony(Sb)



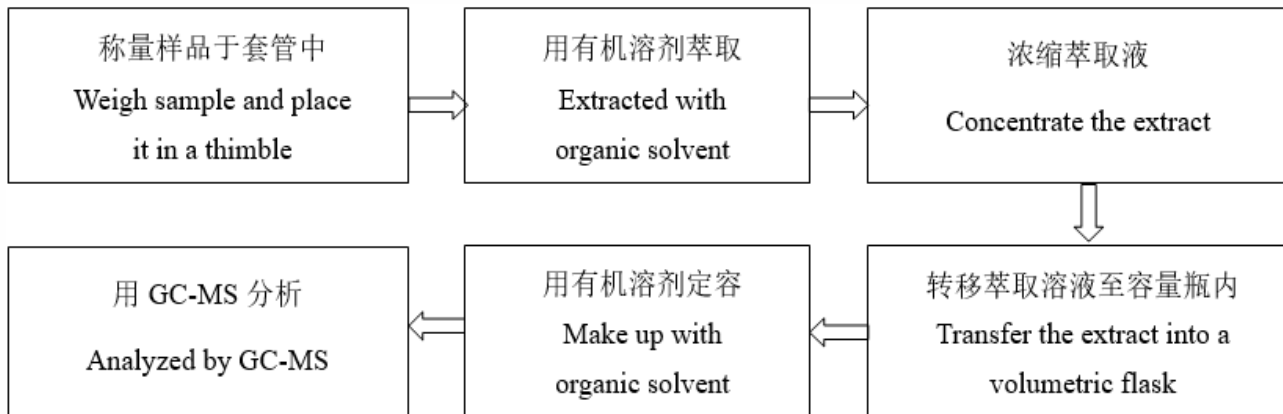
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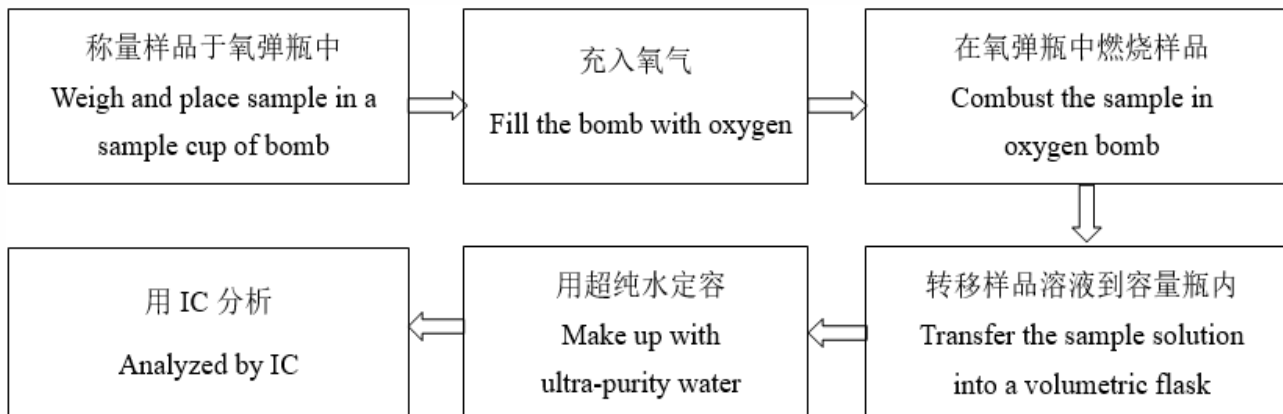
7. 六溴环十二烷(HBCDD)

Hexabromocyclododecane (HBCDD)



8. 氟(F), 氯(Cl), 溴(Br), 碘(I)

Fluorine (F), Chlorine (Cl), Bromine (Br), Iodine (I)

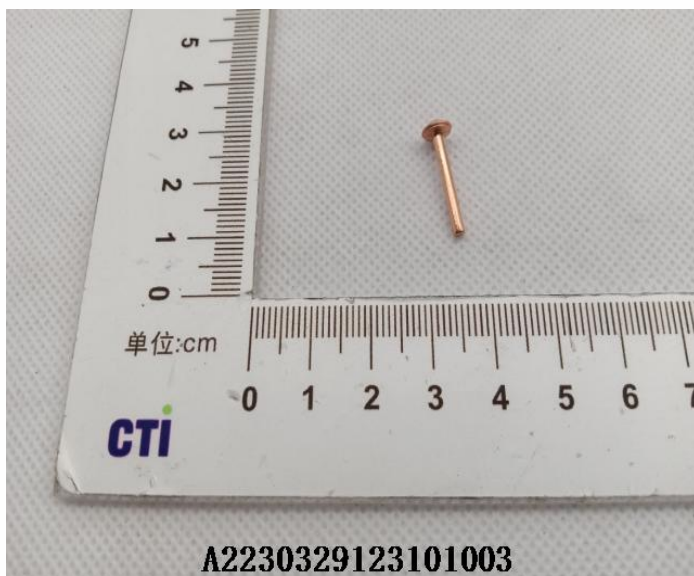


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样品图片 Photo(s) of the sample(s)



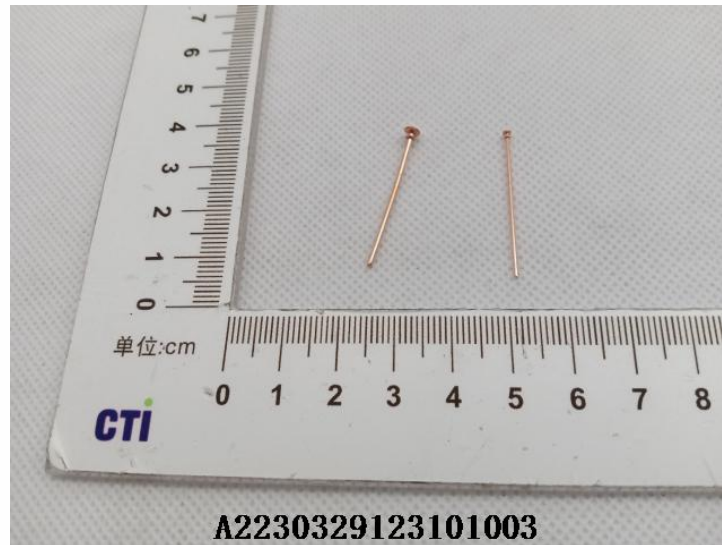
声明Statement:

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The result(s) shown in this report refer(s) only to the sample(s) tested;
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报告结束
*** End of report ***

附录Appendix

客户参考图片（非测试样品） Client Reference Photo (Non-tested sample)



声明Statement:

1. 附录内容由申请者提供，申请者应对其真实性负责，CTI未核实其真实性。
The Appendix Information was/were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified.
2. 附录内容为A2230329123101003E报告的补充。
The Appendix Information is/are the supplement(s) for the Report A2230329123101003E.