



检测报告

Test Report

报告编号 A2250557474101001E
Report No. A2250557474101001E

第 1 页 共 10 页
Page 1 of 10

报告抬头公司名称 江门市联益电镀科技有限公司
Company Name JIANGMEN LIANYI ELECTROPLATING TECHNOLOGY CO., LTD
shown on Report
地 址 江门市新会区崖门镇新财富环保产业园313A栋四楼
Address FOURTH FLOOR, BUILDING 313A, NEW FORTUNE ENVIRONMENTAL PROTECTION INDUSTRIAL PARK, YAMEN TOWN, XINHUI DISTRICT, JIANGMEN CITY

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 金电镀层
Sample Name Au Plated layer
样品接收日期 2025.08.02
Sample Received Date Aug. 2, 2025
样品检测日期 2025.08.02-2025.08.06
Testing Period Aug. 2, 2025 to Aug. 6, 2025

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), 氟(F), 氯(Cl), 溴(Br), 碘(I), 全氟辛酸(PFOA), 全氟辛烷磺酸(PFOS)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), Fluorine (F), Chlorine (Cl), Bromine (Br), Iodine (I), Perfluorooctanoic Acid(PFOA), Perfluorooctane Sulfonates(PFOS) 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).



批准
Approved by
郑晴涛
郑晴涛
技术经理 Technical Manager

日期
Date 2025.08.06

No. R262621774

广东省深圳市宝安区新安街道兴东社区华测检测大楼

CTI Testing International Group Co., Ltd.
CTI Building, Xing Dong Community, Xin'an Sub-district, Bao'an District, Shenzhen City, Guangdong Province, P.R. China

检测报告 Test Report

报告编号 A2250557474101001E
Report No. A2250557474101001E

第 2 页 共 10 页
Page 2 of 10

结论 Conclusion

测试样品 Tested Sample	依据标准/指令 According to standard/directive	结果 Result
提交样品 Submitted Sample	欧盟RoHS指令2011/65/EU及其修订指令(EU) 2015/863 RoHS Directive 2011/65/EU with amendment (EU) 2015/863	符合 PASS

符合表示检测结果满足欧盟RoHS指令2011/65/EU及其修订指令(EU) 2015/863要求的限值。

PASS means that the results shown on the report comply with the limits set by RoHS Directive 2011/65/EU with amendment (EU) 2015/863.

检测报告

Test Report

报告编号 A2250557474101001E

Report No. A2250557474101001E

第 3 页 共 10 页

Page 3 of 10

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)	参考 IEC 62321-5:2013 Refer to IEC 62321-5:2013	ICP-OES
镉 Cadmium (Cd)	参考 IEC 62321-5:2013 Refer to IEC 62321-5:2013	ICP-OES
汞 Mercury (Hg)	参考 IEC 62321-4:2013+AMD1:2017 CSV Refer to 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 62321-12:2023	GC-MS
多溴二苯醚 Polybrominated Diphenyl Ethers (PBDEs)*	IEC 62321-12:2023	GC-MS
邻苯二甲酸酯 Phthalates (DBP, BBP, DEHP, DIBP)*	IEC 62321-12:2023	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
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
全氟辛酸 Perfluorooctanoic Acid(PFOA)*	EN 17681-1:2025	LC-MS-MS
全氟辛烷磺酸 Perfluorooctane Sulfonates(PFOS)*	EN 17681-1:2025	LC-MS-MS

检测报告 Test Report

报告编号 A2250557474101001E

第 4 页 共 10 页

Report No. A2250557474101001E

Page 4 of 10

检测结果 Test Result(s)

测试项目 Tested Item(s)	结果 Result	方法检出限 MDL	限值 Limit
	001		
铅 Lead (Pb)	N.D.	2 mg/kg	1000 mg/kg
镉 Cadmium (Cd)	N.D.	2 mg/kg	100 mg/kg
汞 Mercury (Hg)	N.D.	2 mg/kg	1000 mg/kg
六价铬 Hexavalent Chromium (Cr(VI))	N.D. ▼	0.10 µg/cm ² (LOQ)	1000 mg/kg

测试项目 Tested Item(s)	结果 Result	方法检出限 MDL	限值 Limit
	001		
多溴联苯 Polybrominated Biphenyls (PBBs)*			
一溴联苯 Monobromobiphenyl	N.D.	25 mg/kg	1000 mg/kg
二溴联苯 Dibromobiphenyl	N.D.	25 mg/kg	
三溴联苯 Tribromobiphenyl	N.D.	25 mg/kg	
四溴联苯 Tetrabromobiphenyl	N.D.	25 mg/kg	
五溴联苯 Pentabromobiphenyl	N.D.	25 mg/kg	
六溴联苯 Hexabromobiphenyl	N.D.	25 mg/kg	
七溴联苯 Heptabromobiphenyl	N.D.	25 mg/kg	
八溴联苯 Octabromobiphenyl	N.D.	25 mg/kg	
九溴联苯 Nonabromobiphenyl	N.D.	25 mg/kg	
十溴联苯 Decabromobiphenyl	N.D.	25 mg/kg	

测试项目 Tested Item(s)	结果 Result	方法检出限 MDL	限值 Limit
	001		
多溴二苯醚 Polybrominated Diphenyl Ethers (PBDEs)*			
一溴二苯醚 Monobromodiphenyl ether	N.D.	25 mg/kg	1000 mg/kg
二溴二苯醚 Dibromodiphenyl ether	N.D.	25 mg/kg	
三溴二苯醚 Tribromodiphenyl ether	N.D.	25 mg/kg	
四溴二苯醚 Tetrabromodiphenyl ether	N.D.	25 mg/kg	
五溴二苯醚 Pentabromodiphenyl ether	N.D.	25 mg/kg	
六溴二苯醚 Hexabromodiphenyl ether	N.D.	25 mg/kg	
七溴二苯醚 Heptabromodiphenyl ether	N.D.	25 mg/kg	
八溴二苯醚 Octabromodiphenyl ether	N.D.	25 mg/kg	
九溴二苯醚 Nonabromodiphenyl ether	N.D.	25 mg/kg	
十溴二苯醚 Decabromodiphenyl ether	N.D.	25 mg/kg	

检测报告 Test Report

报告编号 A2250557474101001E

第 5 页 共 10 页

Report No. A2250557474101001E

Page 5 of 10

检测结果 Test Result(s)

测试项目 Tested Item(s)	结果 Result	方法检出限 MDL	限值 Limit
	001		
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	1000 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	1000 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	1000 mg/kg
邻苯二甲酸二异丁酯 Diisobutyl phthalate (DIBP) CAS#:84-69-5	N.D.	50 mg/kg	1000 mg/kg
测试项目 Tested Item(s)	结果 Result	方法检出限 MDL	
	001		
铍 Beryllium (Be)*	N.D.	2 mg/kg	
锑 Antimony (Sb)*	N.D.	5 mg/kg	
测试项目 Tested Item(s)	结果 Result	方法检出限 MDL	
	001		
氟 Fluorine (F)*	N.D.	1 µg/cm ²	
氯 Chlorine (Cl)*	N.D.	1 µg/cm ²	
溴 Bromine (Br)*	N.D.	1 µg/cm ²	
碘 Iodine (I)*	N.D.	1 µg/cm ²	
测试项目 Tested Item(s)	结果 Result	方法检出限 MDL	
	001		
全氟辛酸 Perfluorooctanoic Acid (PFOA)*	N.D.	0.5 µg/m ²	
测试项目 Tested Item(s)	结果 Result	方法检出限 MDL	
	001		
全氟辛烷磺酸 Perfluorooctane Sulfonates (PFOS)*	N.D.	0.5 µg/m ²	

检测报告

Test Report

报告编号 A2250557474101001E

Report No. A2250557474101001E

第 6 页 共 10 页

Page 6 of 10

样品/部位描述 Sample/Part Description

序号 No.	CTI样品ID CTI Sample ID	描述 Description
1	001	金色镀层 Golden plating

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

-1000 mg/kg = 0.1%

-LOQ = 定量限, 六价格的定量限为0.10 $\mu\text{g}/\text{cm}^2$ -六价格浓度小于0.10 $\mu\text{g}/\text{cm}^2$, 样品未检出六价格。由于未获知样品的存储条件和生产日期, 样品的六价格测试结果仅能代表测试时样品含六价格的状态。**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

-1000 mg/kg = 0.1%

-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. Information on storage conditions and production date of the tested sample is unavailable and thus Cr(VI) results represent status of the sample at the time of testing.**注释:** -*表示该项目/方法不在CNAS认可范围内。

-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。

Note: -*indicates the item(s)/method(s) is (are) not in CNAS accreditation scope.

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

检测报告 Test Report

报告编号 A2250557474101001E

Report No. A2250557474101001E

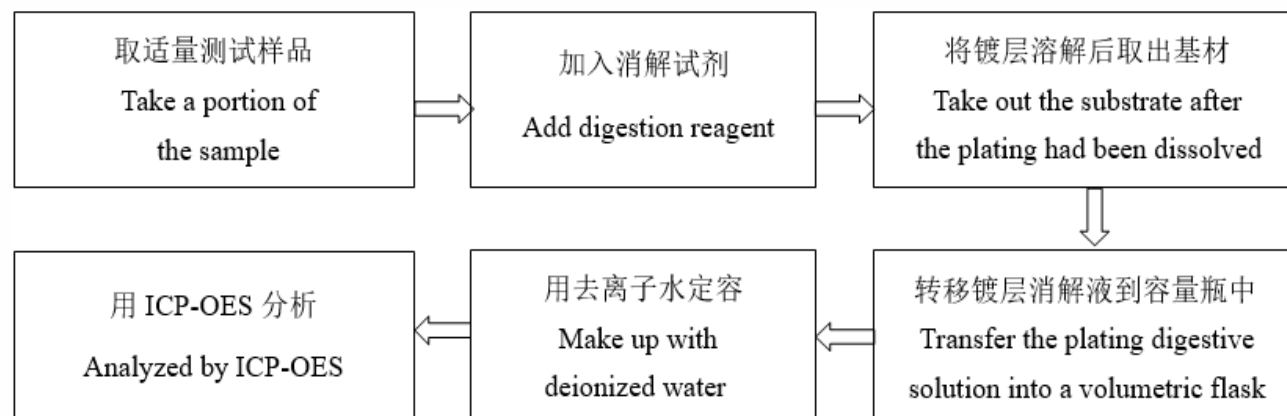
第 7 页 共 10 页

Page 7 of 10

检测流程 Test Process

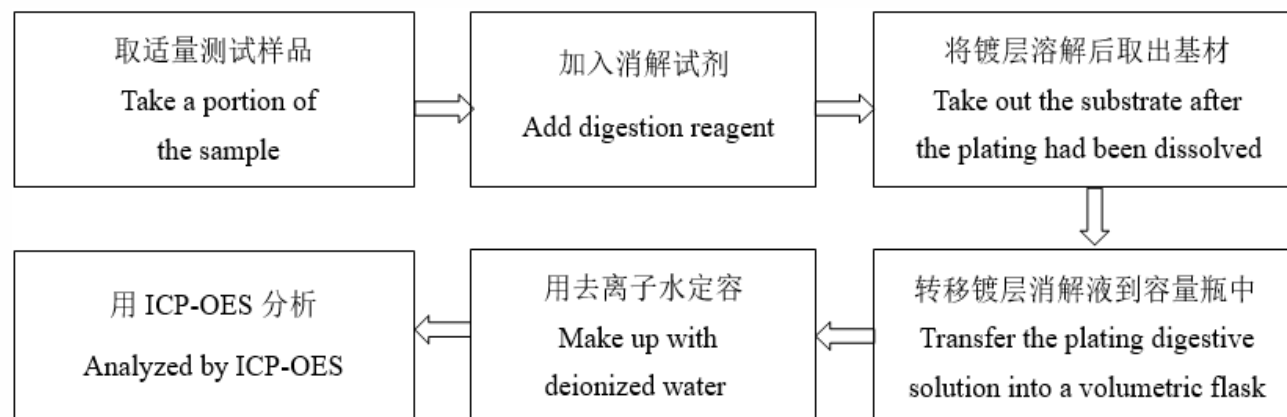
1. 铅(Pb), 镉(Cd)

Lead (Pb), Cadmium (Cd)



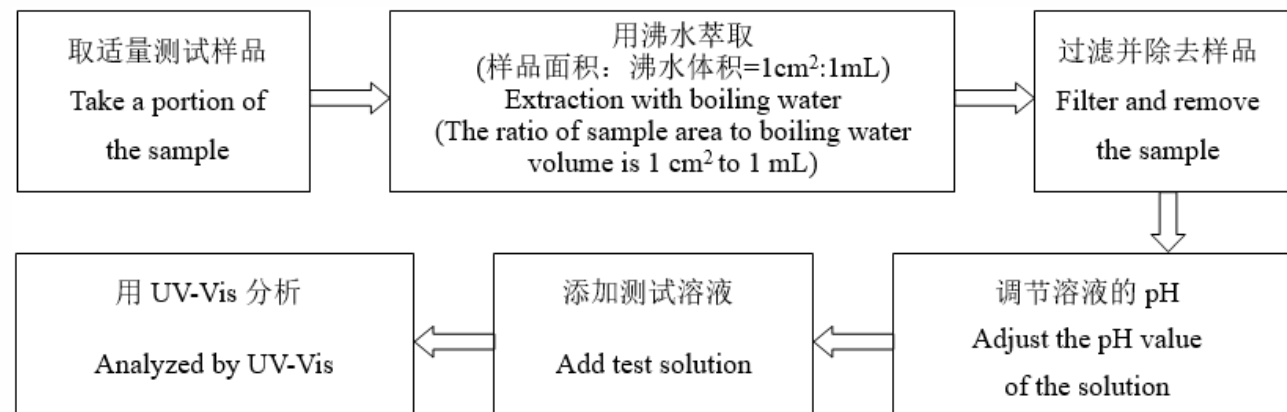
2. 汞(Hg)

Mercury (Hg)



3. 六价铬(Cr(VI))

Hexavalent Chromium (Cr(VI))



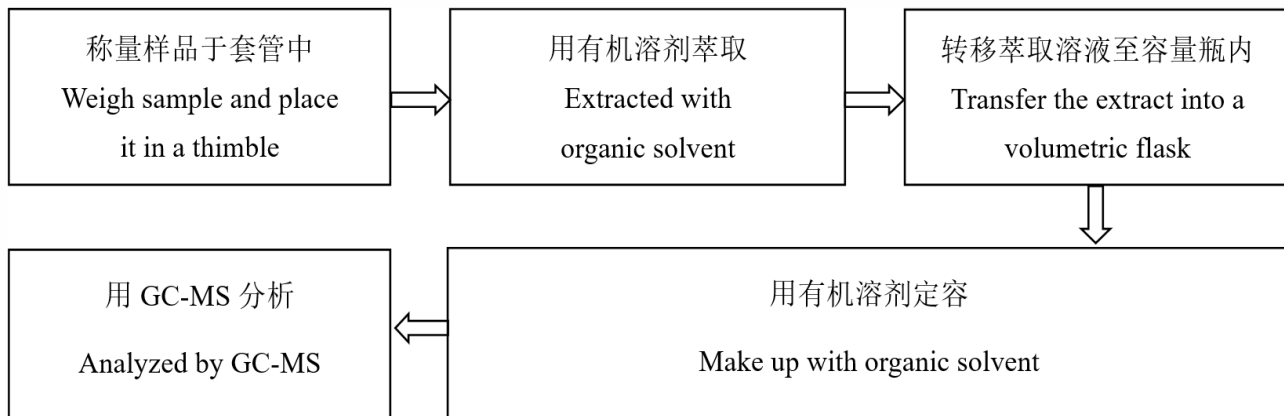
检测报告 Test Report

报告编号 A2250557474101001E
Report No. A2250557474101001E

第 8 页 共 10 页
Page 8 of 10

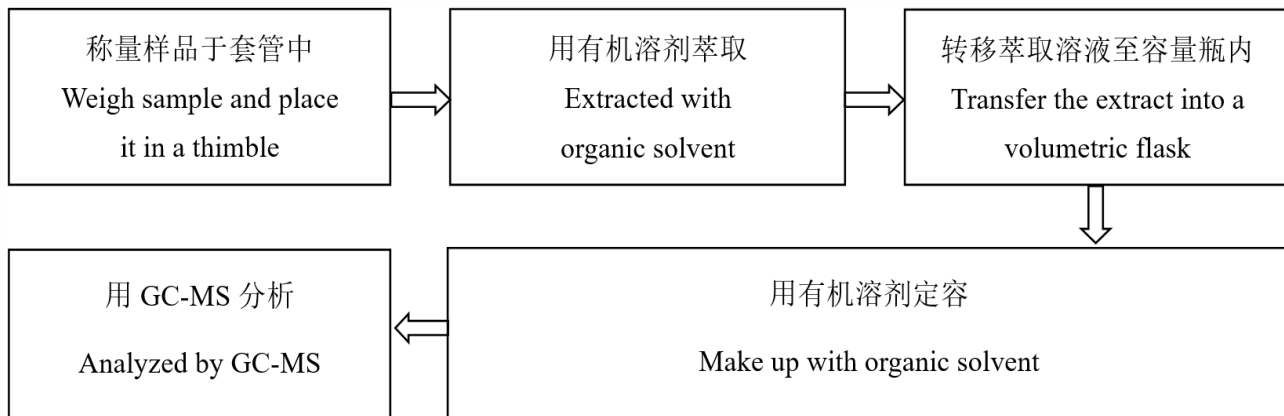
4. 多溴联苯 (PBBs), 多溴二苯醚 (PBDEs)

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



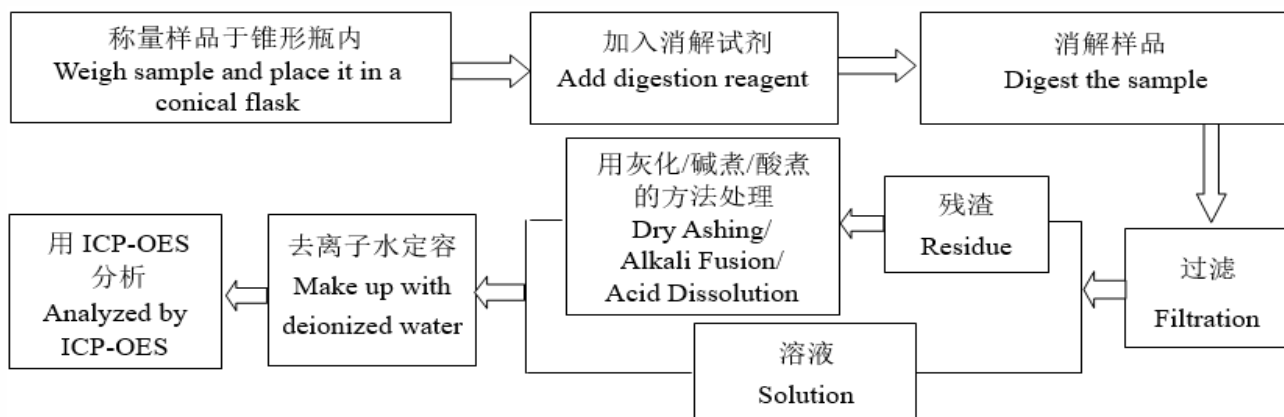
5. 邻苯二甲酸酯 (DBP, BBP, DEHP, DIBP)

Phthalates (DBP, BBP, DEHP, DIBP)



6. 铍 (Be), 锑 (Sb)

Beryllium (Be), Antimony (Sb)



检测报告 Test Report

报告编号 A2250557474101001E

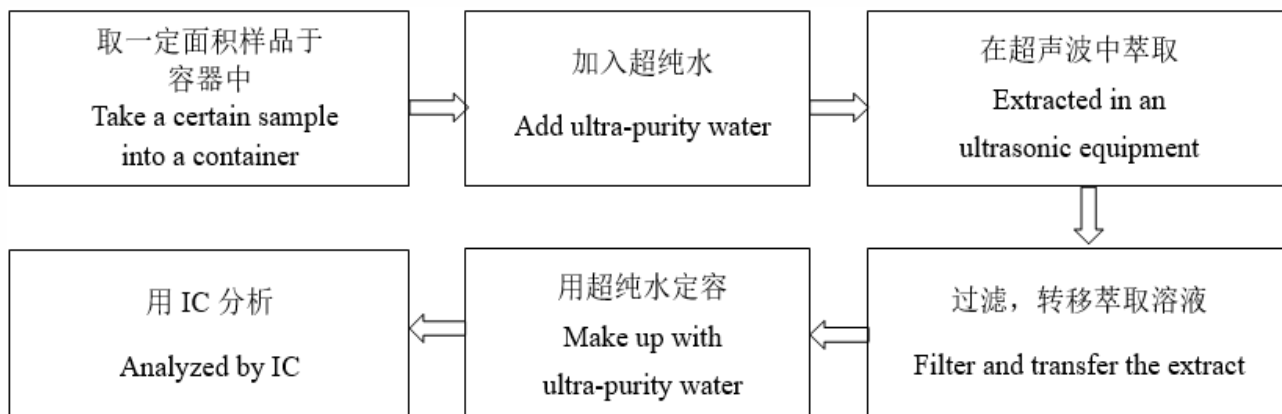
Report No. A2250557474101001E

第 9 页 共 10 页

Page 9 of 10

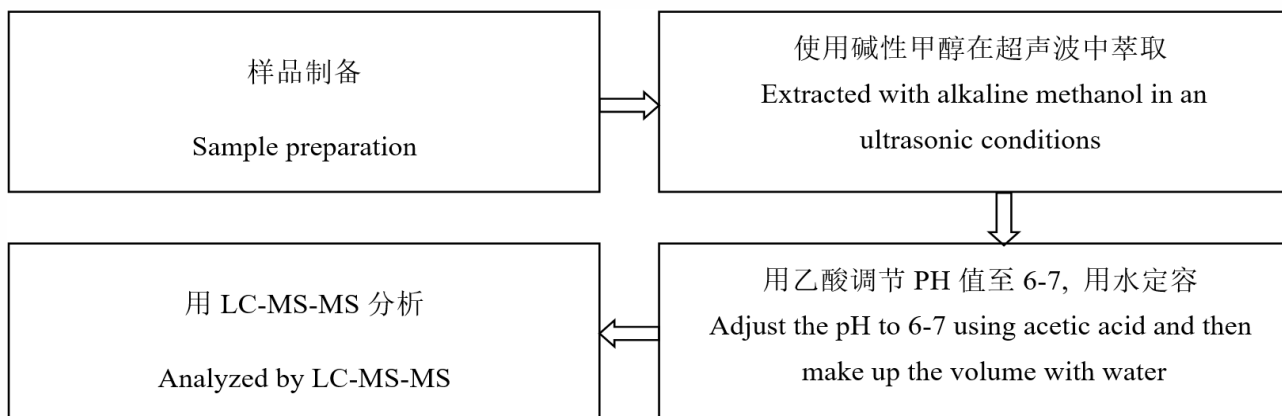
7. 氟(F), 氯(Cl), 溴(Br), 碘(I)

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



8. 全氟辛酸(PFOA), 全氟辛烷磺酸(PFOS)

Perfluorooctanoic Acid(PFOA), Perfluorooctane Sulfonates(PFOS)

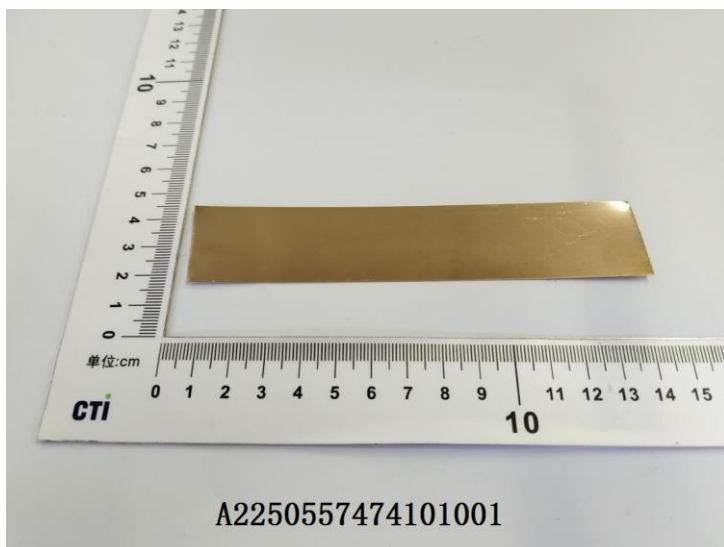


检测报告 Test Report

报告编号 A2250557474101001E
Report No. A2250557474101001E

第 10 页 共 10 页
Page 10 of 10

样品图片 Photo(s) of the sample(s)



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1. 本报告无批准人签字、“专用章”及报告骑缝章无效;
This report is considered invalid without approved signature, special seal and the seal on the perforation;
2. 报告抬头公司名称及地址、样品及样品信息由申请者提供, 申请者应对其真实性负责, CTI未核实其真实性;
The Company Name shown on Report and Address, the sample(s) and sample information was/were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified;
3. 本报告检测结果仅对受测样品负责;
The result(s) shown in this report refer(s) only to the sample(s) tested;
4. 除非另有说明, 报告参照ILAC-G8:09/2019 / CNAS-GL015:2022使用简单接受(w=0)二元判定规则进行符合性判定;
Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule (w=0) stated in ILAC-G8:09/2019 / CNAS-GL015:2022;
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报告结束

*** End of report ***