

检测报告 TEST REPORT

报告编号 (No.) :UTS25020042M

报告日期 (Report Date) : 2025/02/17

委托单位/Client : 苏州诺鸿电子材料有限公司
Suzhou Nuohong Electronic Materials Co., Ltd
地址/Address : 苏州市吴中木胥西路 26 号
No.26 Muxu west Road, Suzhou, Jiangsu

以下样品信息由申请人提供及确认:

The following sample(s) was/were submitted and identified on behalf of the client as:

样品名称/Sample Name : 氟素离型膜/Fluorine film
接样日期/Receiving Date : 2025/02/11
检测项目/Test Item : RoHS 2.0 & 卤素/Halogen
结论/Conclusion : 1. 申请人所提供样品的检测结果符合欧盟 RoHS 指令 2011/65/EU 附录 II 及其修订指令(EU)2015/863 的限值要求。/Based on the analysis of the submitted sample, the results meet the requirements of EU RoHS Directive 2011/65/EU Annex II and its amending Directive (EU)2015/863.
2. 申请人所提供样品的检测结果符合 IEC 61249-2-21:2003 的要求。/Based on the analysis of the submitted sample, the results meet the requirements of IEC 61249-2-21:2003.

签发
Approved by 樊建红
授权签字人

审核
Reviewed by 马林
马林

编制
Prepared by 黄佳蔚
黄佳蔚

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检 测 报 告
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1、测试标准/Test Standard(s)
IEC62321; EN 14582:2016

2、测试日期/Test Date(s)
2025/02/11-2025/02/14

3、测试设备/Test Equipment(s)

设备名称 Test Equipment	设备编号 Equipment Number	校准有效期 Calibration Period of Validity
等离子体发射光谱仪 ICP-OES	M-1-584	2025/12/14
紫外可见分光光度计 UV-vis	M-1-622	2025/12/12
气相色谱质谱联用仪 GC-MS	M-1-583	2025/12/14
离子色谱仪 IC	E-1-1038	2026/11/21

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4、测试结果/Test Result(s)

4.1 RoHS 2.0

检测项目 Test Items	检测方法 Methods	方法检测限 MDL (mg/kg)	检测结果 Results (mg/kg)	法规限值* Limits (mg/kg)
铅/Pb	M1	2	N.D.	1000
镉/Cd		2	N.D.	100
汞/Hg	M2	2	N.D.	1000
六价铬/Cr (VI)	M3	8	N.D.	1000
一溴联苯/Monobromobiphenyl (MonoBB)	M4	5	N.D.	---
二溴联苯/Dibromobiphenyl (DiBB)		5	N.D.	---
三溴联苯/Tribromobiphenyl (TriBB)		5	N.D.	---
四溴联苯/Tetrabromobiphenyl (TetraBB)		5	N.D.	---
五溴联苯/Pentabromobiphenyl (PentaBB)		5	N.D.	---
六溴联苯/Hexabromobiphenyl (HexaBB)		5	N.D.	---
七溴联苯/Heptabromobiphenyl (HeptaBB)		5	N.D.	---
八溴联苯/Octabromobiphenyl (OctaBB)		5	N.D.	---
九溴联苯/Nonabromobiphenyl (NonaBB)		5	N.D.	---
十溴联苯/Decabromobiphenyl (DecaBB)		5	N.D.	---
上述多溴联苯总和/Total PBBs sum of above		---	N.D.	1000
一溴二苯醚/Monobromodiphenyl ether (MonoBDE)		5	N.D.	---
二溴二苯醚/Dibromodiphenyl ether (DiBDE)		5	N.D.	---
三溴二苯醚/Tribromodiphenyl ether (TriBDE)		5	N.D.	---
四溴二苯醚/Tetrabromodiphenyl ether (TetraBDE)		5	N.D.	---
五溴二苯醚/Pentabromodiphenyl ether (PentaBDE)		5	N.D.	---
六溴二苯醚/Hexabromodiphenyl ether (HexaBDE)		5	N.D.	---
七溴二苯醚/Heptabromodiphenyl ether (HeptaBDE)		5	N.D.	---
八溴二苯醚/Octabromodiphenyl ether (OctaBDE)		5	N.D.	---
九溴二苯醚/Nonabromodiphenyl ether (NonaBDE)		5	N.D.	---
十溴二苯醚/Decabromodiphenyl ether (DecaBDE)		5	N.D.	---
上述多溴二苯醚总和/Total PBDEs sum of above		---	N.D.	1000

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检测项目 Test Items	检测方法 Methods	方法检测限 MDL (mg/kg)	检测结果 Results (mg/kg)	法规限值* Limits (mg/kg)
邻苯二甲酸二丁酯/Dibutyl Phthalate (DBP)	M5	30	N.D.	1000
邻苯二甲酸丁基苄基酯/Benzylbutyl Phthalate (BBP)		30	N.D.	1000
邻苯二甲酸二(2-乙基己基)酯 /Di-(2-ethylhexyl)Phthalate (DEHP)		30	N.D.	1000
邻苯二甲酸二异丁酯/Diisobutyl phthalate(DIBP)		30	N.D.	1000

注意/Remark : *报告中述及的法规限值根据是欧盟 RoHS 指令 2011/65/EU 附录 II 及其修订指令 (EU)2015/863 的限值要求。/The Limits are based on the requirements of EU RoHS Directive 2011/65/EU Annex II and its amending Directive (EU)2015/863.

4.2 卤素/Halogen

检测项目 Test Item	检测方法 Methods	方法检测限 MDL (mg/kg)	检测结果 Results (mg/kg)	限值** Limits (mg/kg)
氟/Fluorine (F)	M6	30	369.44	---
氯/Chlorine (Cl)		30	N.D.	900
溴/Bromine (Br)		30	N.D.	900
碘/Iodine (I)		30	N.D.	---
总计/Total (Cl+Br)		---	N.D.	1500

注意/Remark : **报告中述及的限值根据是 IEC 61249-2-21:2003 的要求。/The Limits are based on the requirements of IEC 61249-2-21:2003.

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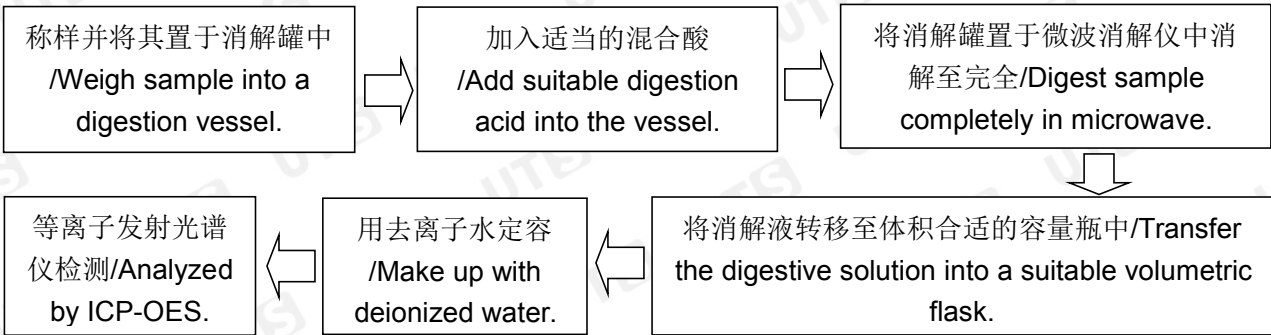
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- 备注 1) “---” = 未明确规定/Not Regulated.
/Note : 2) N.D. = 未检出, 小于方法检测限/Not detected, less than MDL.
 3) M1: 参考 IEC 62321-5: 2013, 采用电感耦合等离子体发射光谱仪进行测定。
 With reference to IEC 62321-5: 2013, analysis was performed by ICP-OES.
 4) M2: 参考 IEC 62321-4: 2013+AMD1: 2017CSV, 采用电感耦合等离子体发射光谱仪进行测定。
 With reference to IEC 62321-4: 2013+AMD1: 2017CSV, analysis was performed by
 ICP-OES.
 5) M3: 参考 IEC 62321-7-2: 2017, 采用紫外-可见分光光度计进行测定。
 With reference to IEC 62321-7-2: 2017, analysis was performed by UV-Vis.
 6) M4: 参考 IEC 62321-6: 2015, 采用气相色谱-质谱联用仪进行测定。
 With reference to IEC 62321-6: 2015, analysis was performed by GC-MS.
 7) M5: 参考 IEC 62321-8: 2017, 采用气相色谱-质谱联用仪进行测定。
 With reference to IEC 62321-8: 2017, analysis was performed by GC-MS.
 8) M6: 参考 EN 14582: 2016, 采用离子色谱法(IC)进行检测。
 With reference to EN 14582: 2016, analysis was performed by IC.

检测部位描述/TEST PART DESCRIPTION: 非金属/Non-metal

检测流程图/FLOW CHART

1. Pb、Cd、Hg 检测/Test for Pb, Cd, Hg Content



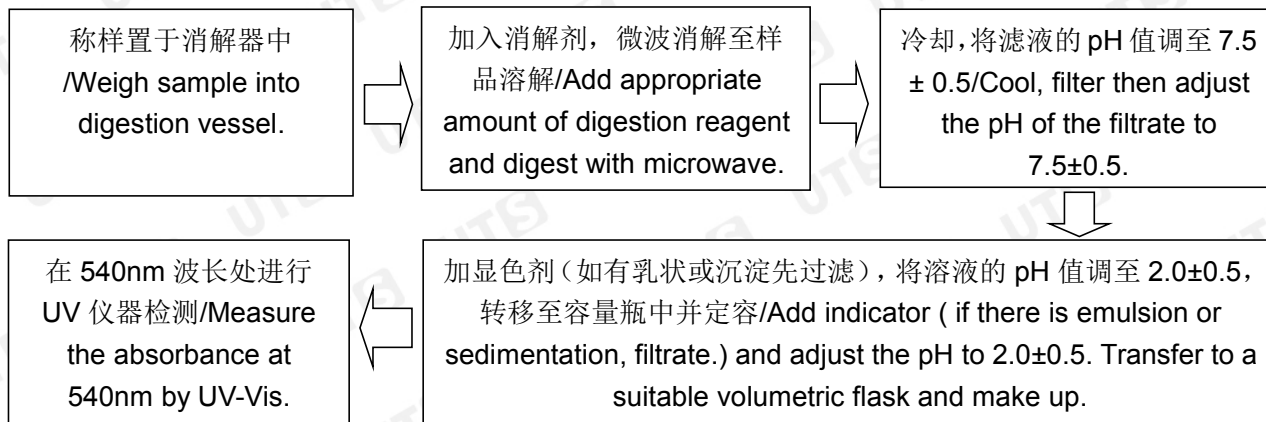
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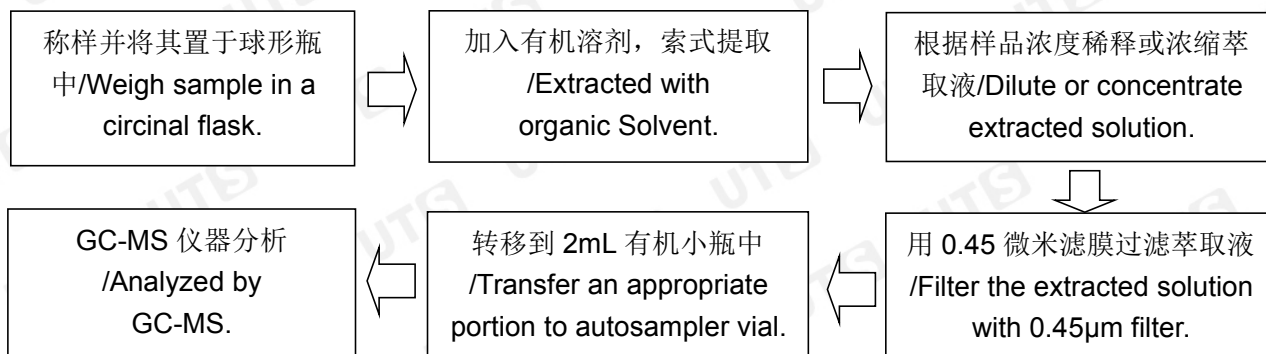
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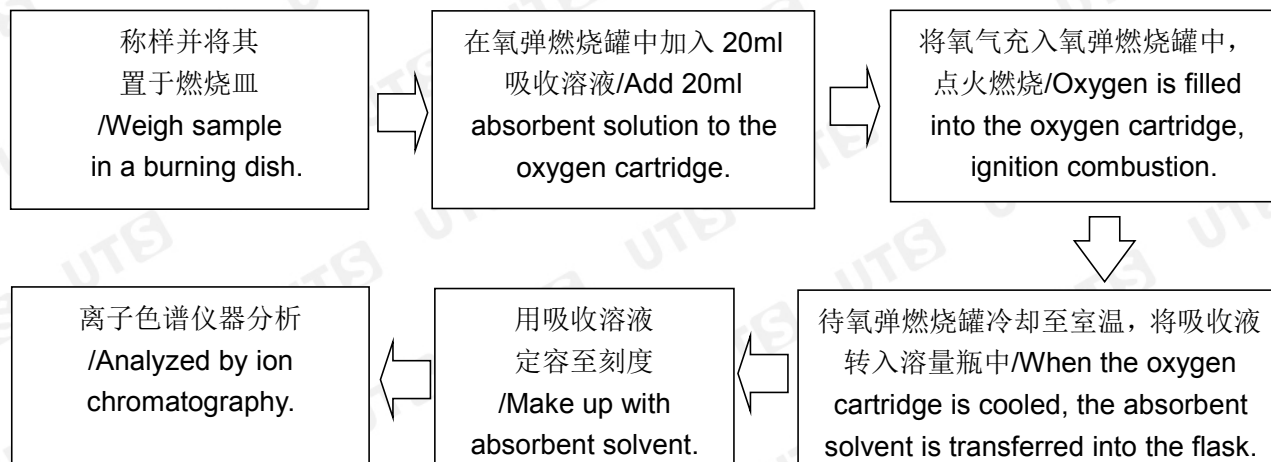
2. 六价铬 Cr (VI) 检测/Test for Chromium (VI) Content



3. 多溴联苯&多溴二苯醚和邻苯二甲酸酯检测 /Test for PBBs&PBDEs and Phthalates



4. 卤素检测/Test for halogen Content



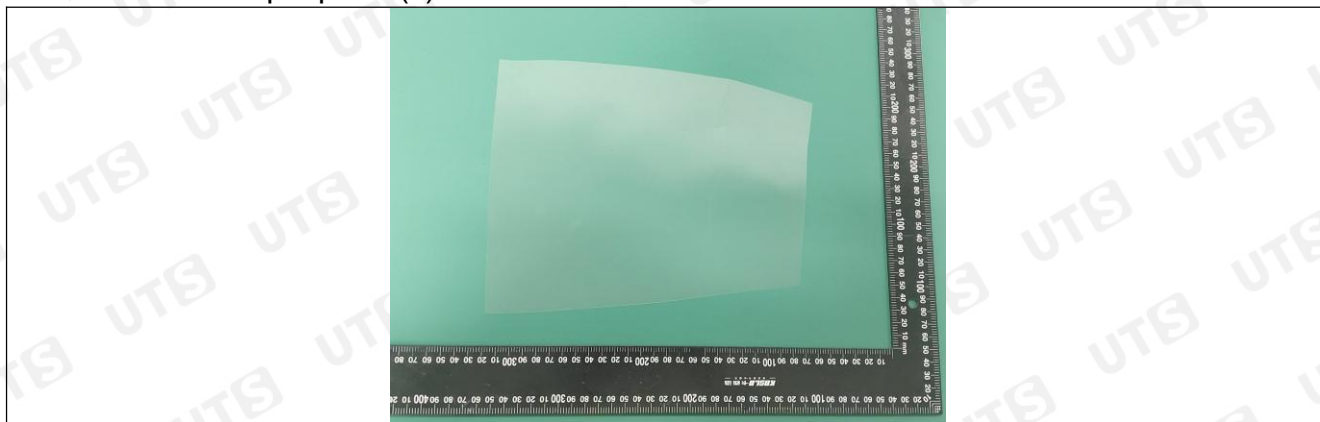
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5、样品照片/Sample photo(s)



.....报告结束/End of Report.....

本报告中结果仅作为科研、教学或内部质量控制之用。

Test results in this report are only used for scientific research, teaching and internal quality control.