检　测　报　告
TEST REPORT

报告编号（No.）:UTS25080328M01　　报告日期（Report Date）: 2025/08/29

委托单位/Client	:	河南汀浠新材料有限公司 Henan Tingxi New Materials Co., Ltd
地　　址/Address	:	洛阳市洛龙区孝文大道与开元大道交叉口 Intersection of Xiaowen Avenue and Kaiyuan Avenue, Luolong District, Luoyang City

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	:	新型增塑剂/New plasticizer
接样日期/Receiving Date	:	2025/08/25
检测项目/Test Item	:	RoHS 2.0
结　　论/Conclusion	:	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.

签　发 Approved by	审　核 Reviewed by	编　制 Prepared by
樊建红 授权签字人	马林	金颖

This Test Report is issued by the Company subject to its General Conditions of Service printed overleaf or available on request. Attention is drawn to the limitations of liability, indemnification and jurisdictional policies defined therein. The results shown in this Test report refer only to the sample(s) tested unless otherwise stated This test report shall not be reproduced, except in full, without written approval of the Company. 本报告按本公司所制定之通用服务条款所编制发放。请注意本报告首页背面之此条款，本公司之义务、免责、管辖权均有明确规定，该条款也可向本公司索取。除非另有说明，本报告仅对来样负责，未经许可，不得部分复制本报告。

江苏省优联检测技术服务有限公司
地址：苏州市吴中区越溪街道北官渡路50号3幢　215021
电话（Tel）：+0512-66358200

UNITED TESTING SERVICES (JIANGSU) CO., LTD.
Address: Building 3, No.50 Beiguandu Road, Wuzhong Zone, Suzhou, Jiangsu, China , 215021
传真（Fax）：+0512-66358088

检 测 报 告
TEST REPORT

报告编号（No.）:UTS25080328M01　报告日期（Report Date）: 2025/08/29

1、测试标准/Test Standard(s)

IEC62321-5:2013;IEC62321-4:2013+AMD1:2017CSV;IEC62321-7-2:2017;IEC62321-6:2015;
IEC62321-8:2017

2、测试日期/Test Date(s)

2025/08/26-2025/08/27

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
气相色谱质谱联用仪 GC-MS	M-1-582	2025/12/14

……接下页/ To be continued……

江苏省优联检测技术服务有限公司
地址：苏州市吴中区越溪街道北官渡路50号3幢　215021
电话（Tel）：+0512-66358200
UNITED TESTING SERVICES (JIANGSU) CO., LTD.
Address: Building 3, No.50 Beiguandu Road, Wuzhong Zone, Suzhou, Jiangsu, China , 215021
传真（Fax）：+0512-66358088
---------- www.uts.com.cn ----------

检 测 报 告
TEST REPORT

报告编号（No.）:UTS25080328M01 报告日期（Report Date）: 2025/08/29

4、测试结果/Test Result(s)

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

江苏省优联检测技术服务有限公司
地址：苏州市吴中区越溪街道北官渡路50号3幢 215021
电话（Tel）：+0512-66358200
UNITED TESTING SERVICES (JIANGSU) CO., LTD.
Address: Building 3, No.50 Beiguandu Road, Wuzhong Zone, Suzhou, Jiangsu, China , 215021
传真（Fax）：+0512-66358088
---------- www.uts.com.cn ----------

检 测 报 告
TEST REPORT

报告编号（No.）:UTS25080328M01　　报告日期（Report Date）: 2025/08/29

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.

备注 /Note :

1) "---" = 未明确规定/Not Regulated.
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.

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

……接下页/ To be continued……

江苏省优联检测技术服务有限公司
地址：苏州市吴中区越溪街道北官渡路50号3幢　215021
电话（Tel）：+0512-66358200
UNITED TESTING SERVICES (JIANGSU) CO., LTD.
Address: Building 3, No.50 Beiguandu Road, Wuzhong Zone, Suzhou, Jiangsu, China , 215021
传真（Fax）：+0512-66358088
---------- www.uts.com.cn ----------

检 测 报 告
TEST REPORT

报告编号（No.）:UTS25080328M01 报告日期（Report Date）: 2025/08/29

检测流程图/FLOW CHART

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

称样并将其置于消解罐中/Weigh sample into a digestion vessel. → 加入适当的混合酸/Add suitable digestion acid into the vessel. → 将消解罐置于微波消解仪中消解至完全/Digest sample completely in microwave. → 将消解液转移至体积合适的容量瓶中/Transfer the digestive solution into a suitable volumetric flask. → 用去离子水定容/Make up with deionized water. → 等离子发射光谱仪检测/Analyzed by ICP-OES.

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

称样置于消解器中/Weigh sample into digestion vessel. → 加入消解剂，微波消解至样品溶解/Add appropriate amount of digestion reagent and digest with microwave. → 冷却，将滤液的 pH 值调至 7.5 ± 0.5/Cool, filter then adjust the pH of the filtrate to 7.5±0.5. → 加显色剂（如有乳状或沉淀先过滤），将溶液的 pH 值调至 2.0±0.5，转移至容量瓶中并定容/Add indicator (if there is emulsion or sedimentation, filtrate.) and adjust the pH to 2.0±0.5. Transfer to a suitable volumetric flask and make up. → 在 540nm 波长处进行 UV 仪器检测/Measure the absorbance at 540nm by UV-Vis.

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

称样并将其置于球形瓶中/Weigh sample in a circinal flask. → 加入有机溶剂，索式提取/Extracted with organic Solvent. → 根据样品浓度稀释或浓缩萃取液/Dilute or concentrate extracted solution. → 用 0.45 微米滤膜过滤萃取液/Filter the extracted solution with 0.45μm filter. → 转移到 2mL 有机小瓶中/Transfer an appropriate portion to autosampler vial. → GC-MS 仪器分析/Analyzed by GC-MS.

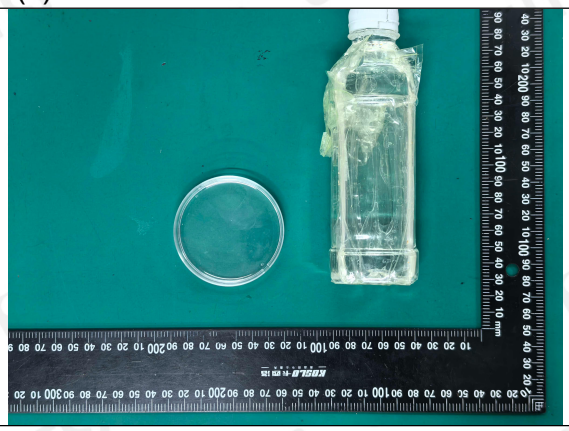
……接下页/ To be continued……

江苏省优联检测技术服务有限公司
地址：苏州市吴中区越溪街道北官渡路50号3幢 215021
电话（Tel）：+0512-66358200
UNITED TESTING SERVICES (JIANGSU) CO., LTD.
Address: Building 3, No.50 Beiguandu Road, Wuzhong Zone, Suzhou, Jiangsu, China , 215021
传真（Fax）：+0512-66358088
---------- www.uts.com.cn ----------

检　测　报　告
TEST REPORT

报告编号（No.）:UTS25080328M01　　报告日期（Report Date）: 2025/08/29

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.

江苏省优联检测技术服务有限公司
地址：苏州市吴中区越溪街道北官渡路50号3幢　215021
电话（Tel）：+0512-66358200

UNITED TESTING SERVICES (JIANGSU) CO., LTD.
Address: Building 3, No.50 Beiguandu Road, Wuzhong Zone, Suzhou, Jiangsu, China , 215021
传真（Fax）：+0512-66358088