

检 测 报 告
TEST REPORT

报告编号 (No.) : UTS24110129MR1 报告日期 (Report Date) : 2024/11/21

委托单位/Client : 富钛金属科技 (昆山) 有限公司
Rich Titanium Metal Technology (Kunshan) Co., Ltd
地 址/Address : 江苏省昆山市玉山镇晨丰东路 159 号
159 Chenfeng East Road, Yushan Town, Kunshan City, Jiangsu
Province

以下样品信息由申请人提供及确认:

The sample(s) information below is/are provided and confirmed by client:

样品名称/Sample Name : 组合前灯驱动总成壳体/Combination headlight drive assembly
housing
材 质/Material : ADC12
零 件 号/Part Number : 4121992X994WA B
主 机 厂/OEM : 长城汽车股份有限公司/Great Wall Motor Company Limited
接样日期/Receiving Date : 2024/11/12
检测项目/Test Item : 禁/限用物质 (铅、镉、汞、六价铬、多溴联苯、多溴二苯醚)
/Prohibited/restricted substances (Pb, Cd, Hg, Cr (VI), PBBs,
PBDEs)
结 论/Conclusion : 申请人所提供的样品的测试结果符合 GWT A A82-01:2023-12 《汽
车禁/限用物质要求》。/Based on the analysis on the submitted
sample, the results do comply with the GWT A A82-01: 2023-12
"Requirements for Prohibited/Restricted Substances for Vehicles".

签 发
Approved by
检验检测专用章
授权签字人

审 核
Reviewed by

赵方方

编 制
Prepared by

黄佳蔚

Page 1 of 7

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

www.uts.com.cn

检 测 报 告

TEST REPORT

报告编号 (No.) :UTS24110129MR1 报告日期 (Report Date) : 2024/11/21

1、测试标准/Test Standard(s)

GWT A A82-01:2023-12 《汽车禁/限用物质要求》

“Requirements for Prohibited/Restricted Substances for Vehicles”

2、测试日期/Test Date(s)

2024/11/13-2024/11/15

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	2024/12/14
气相色谱质谱联用仪 GC-MS	M-1-583	2025/12/14

.....接下页/ To be continued.....

检 测 报 告
TEST REPORT

报告编号 (No.) :UTS24110129MR1 报告日期 (Report Date) : 2024/11/21

4、测试结果/Test Result(s)

4.1、非金属/Non-metal

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)	限值* Limited Value (mg/kg)
			涂层 /Paint-coat	
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

.....接下页/ To be continued.....

检 测 报 告
TEST REPORT

报告编号 (No.) :UTS24110129MR1 报告日期 (Report Date) : 2024/11/21

4.2、金属/Metal

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)	限值* Limited Value (mg/kg)
			基材 /Substrate	
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)	M3a	---	阴性 Negative	---

注意/Remark : *报告中提及的限值根据是 GWT A A82-01:2023-12 《汽车禁/限用物质要求》。 / The Limited value is based on the GWT A A82-01:2023-12 "Requirements for Prohibited/Restricted Substances for Vehicles".

- 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) M3a: 参考 IEC 62321-7-1: 2015/With reference to IEC 62321-7-1: 2015,
沸水萃取法:
阴性: 样品中检测到六价铬含量小于 0.10µg/cm²; 阳性: 样品中检测到六价铬含量大于 0.13µg/cm²; 不能下判定: 样品中检测到六价铬含量在 0.10µg/cm² 于 0.13µg/cm² 之间;
Negative:The Cr(VI) concentration of sample is blow 0.10µg/cm²;
Positive:The Cr(VI) concentration of sample is above 0.13µg/cm² ;
Inconclusive:The Cr(VI) concentration of sample is between 0.10µg/cm² and 0.13µg/cm² .
- 7) 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.

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

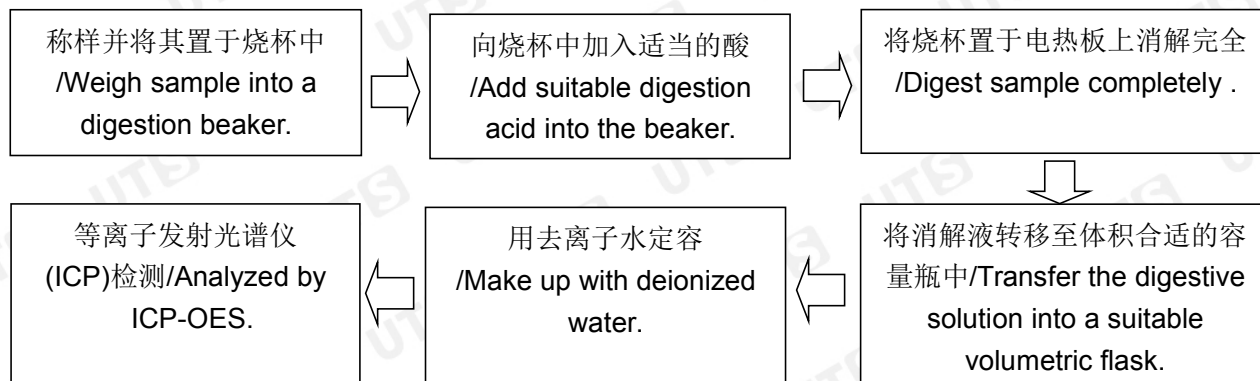
检 测 报 告
TEST REPORT

报告编号 (No.) : UTS24110129MR1 报告日期 (Report Date) : 2024/11/21

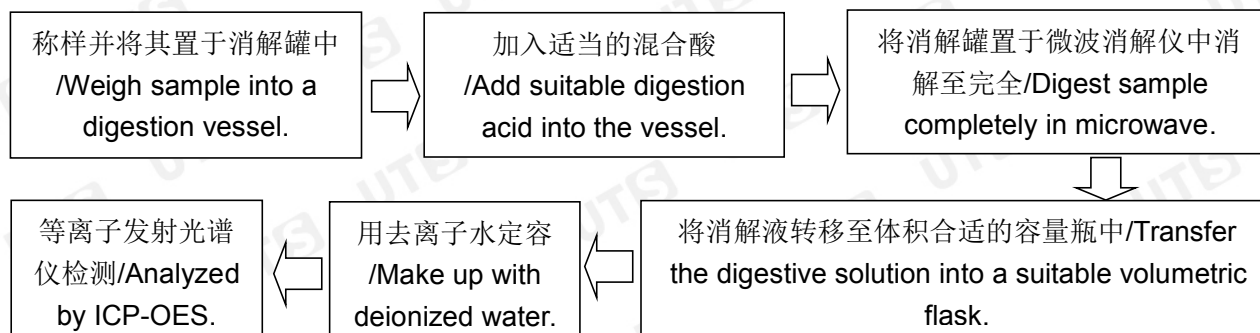
检测流程图/FLOW CHART

金属/Metal

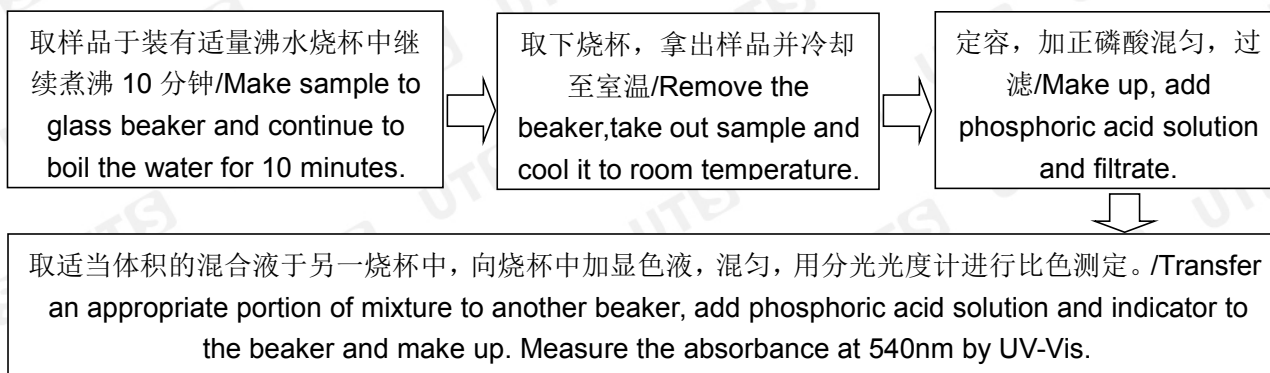
1. Pb、Cd 检测/Test for Pb, Cd Content



2. Hg 检测/Test for Hg Content



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



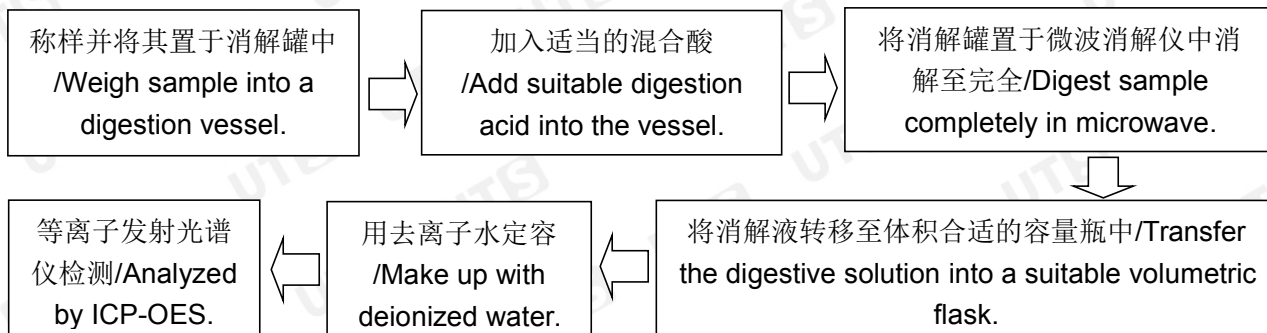
.....接下页/ To be continued.....

检测报告 TEST REPORT

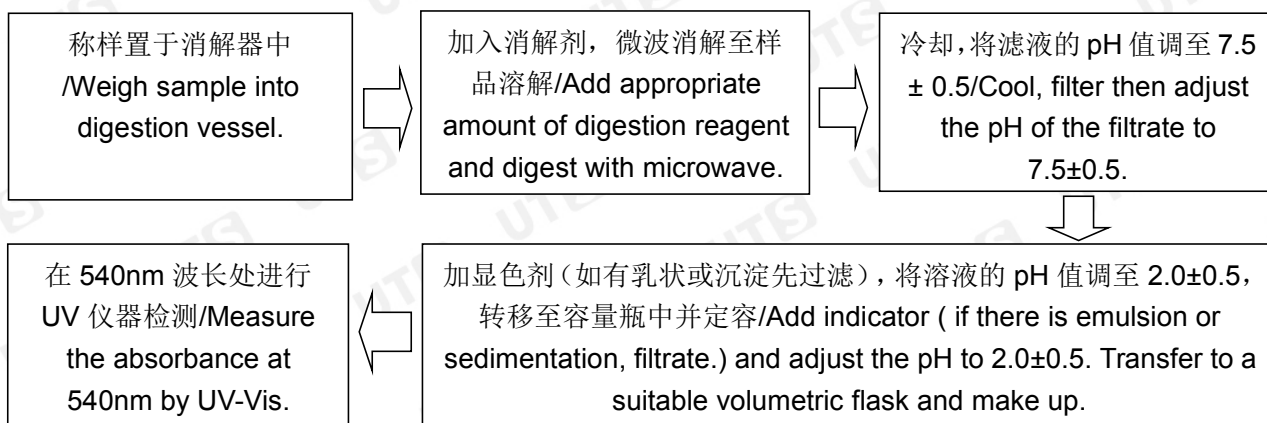
报告编号 (No.) : UTS24110129MR1 报告日期 (Report Date) : 2024/11/21

非金属/Non-metal

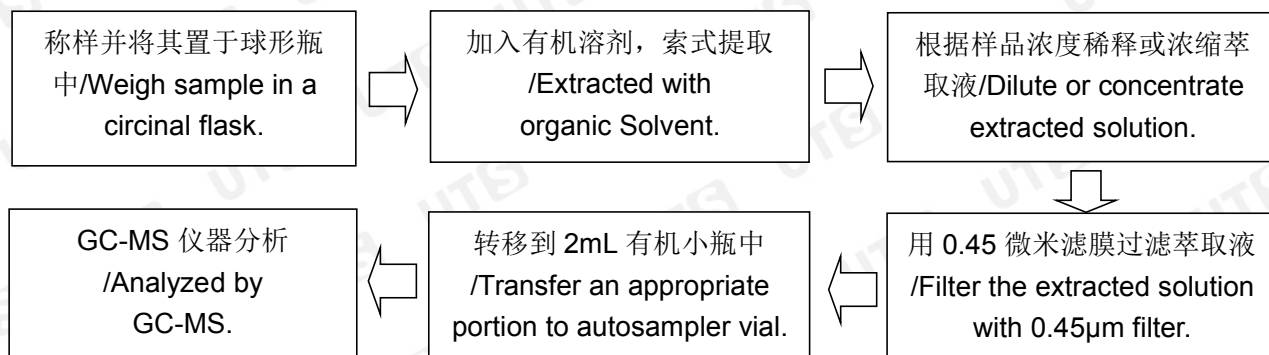
4. Pb、Cd、Hg 检测/Test for Pb, Cd, Hg Content



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



6. 多溴联苯&多溴二苯醚检测 /Test for PBBs&PBDEs



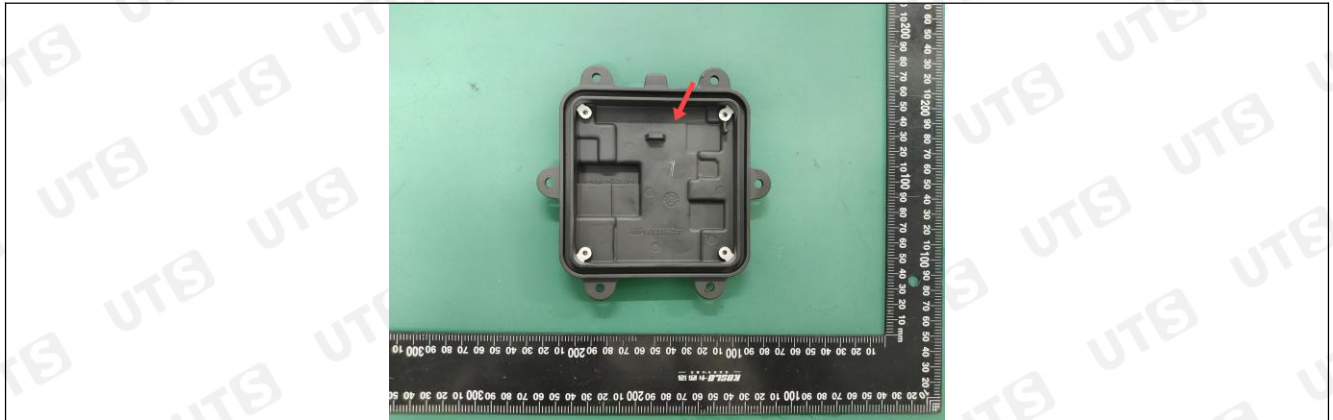
.....接下页/ To be continued.....

检 测 报 告

TEST REPORT

报告编号 (No.) : UTS24110129MR1 报告日期 (Report Date) : 2024/11/21

5、样品照片/Sample photo(s)



此报告代替之前 2024/11/18 发出的报告 UTS24110129M，特此声明报告 UTS24110129M 作废。
This report replaces the report UTS24110129M that was issued on 2024/11/18 we hereby declare that the report UTS24110129M is invalid.

.....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.