

检 测 报 告

TEST REPORT

报告编号 (No.) :UTS25050065M04 报告日期 (Report Date) : 2025/05/16

委托单位/Client : 浦项世亚线材 (南通) 有限公司
POS-SeAH Steel Wire (Nantong) Co.,Ltd.
地 址/Address : 江苏省南通市经济开发区江海路 92 号
No.92 Jianghai Road,Nantong Economic&Technology Development Zone ,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 : CHQ WIRE 冷锻用线材/CHQ Wire Cold Forging Wire
钢 种/Steel Type : SCM435H
接样日期/Receiving Date : 2025/05/09
检测项目/Test Item : 禁用物质 6 项/Prohibited substances 6 items
结 论/Conclusion : 申请人所提供的样品的测试结果符合 GB/T 30512-2014《汽车禁用物质要求》。/Based on the analysis of the submitted sample, the results meet the requirements of GB/T 30512-2014 Requirements for prohibited substances on automobiles.



签 发 樊建红
Approved by 樊建红 授权签字人

审 核 马林
Reviewed by 马林

编 制 黄佳蔚
Prepared by 黄佳蔚

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1、测试标准/Test Standard(s)

QC/T 941-2013; QC/T 942-2021; QC/T 943-2013; QC/T 944-2013

2、测试日期/Test Date(s)

2025/05/13-2025/05/14

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

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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)	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	---	阴性 Negative	---
一溴联苯/Monobromobiphenyl (MonoBB)	M4	5	N.A.	---
二溴联苯/Dibromobiphenyl (DiBB)		5	N.A.	---
三溴联苯/Tribromobiphenyl (TriBB)		5	N.A.	---
四溴联苯/Tetrabromobiphenyl (TetraBB)		5	N.A.	---
五溴联苯/Pentabromobiphenyl (PentaBB)		5	N.A.	---
六溴联苯/Hexabromobiphenyl (HexaBB)		5	N.A.	---
七溴联苯/Heptabromobiphenyl (HeptaBB)		5	N.A.	---
八溴联苯/Octabromobiphenyl (OctaBB)		5	N.A.	---
九溴联苯/Nonabromobiphenyl (NonaBB)		5	N.A.	---
十溴联苯/Decabromobiphenyl (DecaBB)		5	N.A.	---
上述多溴联苯总和/Total PBBs sum of above		---	N.A.	1000
一溴二苯醚/Monobromodiphenyl ether (MonoBDE)		5	N.A.	---
二溴二苯醚/Dibromodiphenyl ether (DiBDE)		5	N.A.	---
三溴二苯醚/Tribromodiphenyl ether (TriBDE)		5	N.A.	---
四溴二苯醚/Tetrabromodiphenyl ether (TetraBDE)		5	N.A.	---
五溴二苯醚/Pentabromodiphenyl ether (PentaBDE)		5	N.A.	---
六溴二苯醚/Hexabromodiphenyl ether (HexaBDE)		5	N.A.	---
七溴二苯醚/Heptabromodiphenyl ether (HeptaBDE)		5	N.A.	---
八溴二苯醚/Octabromodiphenyl ether (OctaBDE)		5	N.A.	---
九溴二苯醚/Nonabromodiphenyl ether (NonaBDE)		5	N.A.	---
十溴二苯醚/Decabromodiphenyl ether (DecaBDE)		5	N.A.	---
上述多溴二苯醚总和/Total PBDEs sum of above		---	N.A.	1000

注意/Remark : *报告中述及的限值参考 GB/T 30512-2014《汽车禁用物质要求》。/ The Limited value is refer to GB/T 30512-2014 Requirements for prohibited substances on automobiles.

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- 备注/Note:
- 1) N.D. = 未检出, 小于方法检测限/Not detected, less than MDL.
 - 2) N.A. = 金属件不适用/Metal parts not applicable
 - 3) “---” = 未明确规定/Not Regulated.
 - 4) M1: 参考 QC/T 943-2013, 采用电感耦合等离子体发射光谱仪进行测定。
With reference to QC/T 943-2013, analysis was performed by ICP-OES.
 - 5) M2: 参考 QC/T 941-2013, 采用电感耦合等离子体发射光谱仪进行测定。
With reference to QC/T 941-2013, analysis was performed by ICP-OES.
 - 6) M3: 参考 QC/T 942-2021/With reference to QC/T 942-2021,
点测试法: 阴性=样品中未检测到六价铬, 阳性=样品中检测到六价铬;
(当点测试结果为无法确定时, 将采用沸水萃取法来检验结果)
沸水萃取法: 阴性=样品中未检测到六价铬; 阳性=样品中检测到六价铬,
50cm² 表面积的被测试样品在沸水萃取溶液中六价铬的浓度等于或大于 0.1µg/cm²。 Spot
test: Negative=Not detected Cr(VI) in plating; Positive=Detected Cr(VI) in plating.
(If you are not sure about the result of the Spot test, use the boiling water extraction
method to confirm the result)
Boiling water extraction method:
Negative= Not detected Cr(VI) in plating; Positive=The Cr(VI) concentration detected is
equal to or greater than 0.1µg/cm² with a sample surface area of 50cm² used.
 - 7) M4: 参考 QC/T 944-2013, 采用气相色谱-质谱联用仪进行测定。
With reference to QC/T 944-2013, analysis was performed by GC-MS.

测试部位描述/TEST PART DESCRIPTION: 金属/Metal

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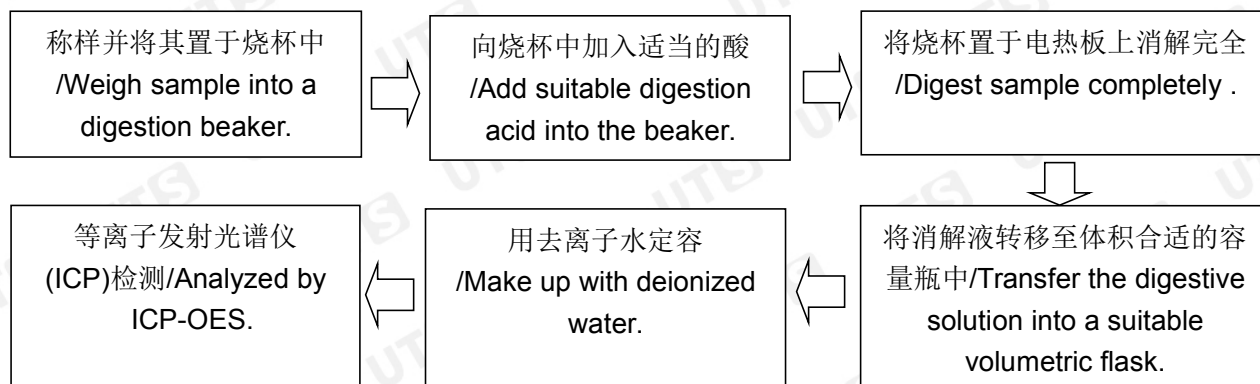
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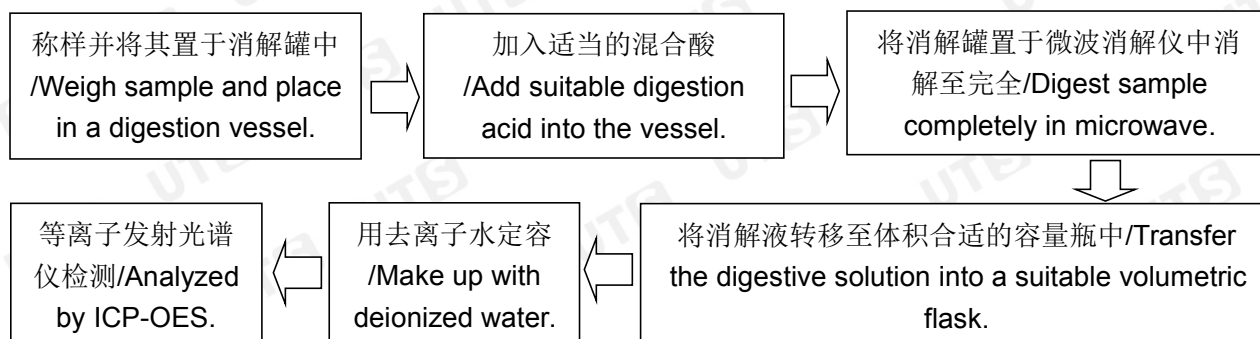
报告日期 (Report Date) : 2025/05/16

检测流程图/FLOW CHART

1. Pb、Cd 检测/Test for Pb, Cd Content



2. Hg 检测/Test for Hg Content



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

a) 点滴试验法/Point test method:

试样前处理: 表面清洁, 若表面有油污, 聚合物涂层, 需除去/Pre-treatment of Sample: Clean the surface; if there is oil layer or polymer coating on the surface, remove it.

向样品表面滴加 1-5 滴显色液。如含有六价铬, 几分钟内会出现红色或紫红色, 长时间后出现的颜色不予考虑/Dip one to five drops of test liquid to the surface. If there is hexavalent chromium, violet color will appear within several minutes. If the color appears after a long time, it will not be considered.

如检测结果阳性, 可认为有六价铬镀层存在 /If the test result is positive, it can be considered that there is hexavalent chromium.

如检测结果阴性/If the test result is negative.

用精细砂纸轻轻擦掉表层, 滴加显色液 /Wipe the surface of the coating lightly with fine sandpaper and dip test liquid.

如结果还是阴性/If the result is negative.

将镀层擦的更深, 继续检测, 在到达基体前, 结果仍然呈阴性, 可认为该样品六价铬呈阴性。 /Wipe the coating more deeply and continue the test until it reaches the surface. If the test result is still negative, it can be considered that sample is negative.

b) 沸水萃取法/Boiling water extraction method:

取样品于装有适量沸水烧杯中继续煮沸 10 分钟/Make sample to glass beaker and continue to boil the water for 10 minutes.

取下烧杯, 拿出样品并冷却至室温/Remove the beaker, take out sample and cool it to room temperature.

定容, 如有乳状或沉淀, 先过滤/Add water to mask; filtrate emulsion or sedimentation first.

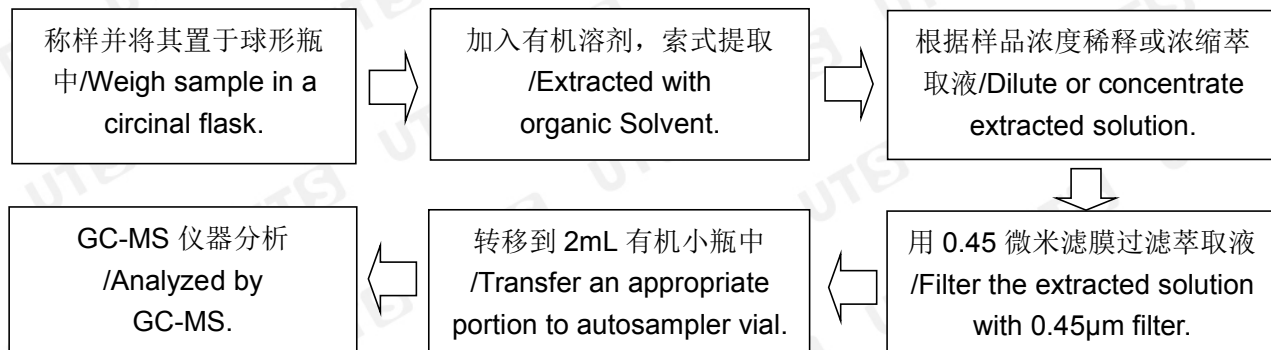
取适当体积的混合液于另一烧杯中, 向烧杯中加入正磷酸和显色液, 定容, 用分光光度计进行比色测定。 /Transfer an appropriate portion of mixture to another beaker, add phosphoric acid solution and indicator to the beaker and make up. Measure the absorbance at 540nm by UV-Vis.

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4. 多溴联苯&多溴二苯醚检测/Test for PBBs&PBDEs Content



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.