Test Report

Report Number.....:	RLT2507255-02
Date of issue.....:	2025-07-26
Prepared by.....:	Rhenish-Lab Certification & Testing (Shenzhen) Co.,Ltd.
Address.....:	101, Building B, Bailu Plaza, No.48, Gonghe Industrial Road, Gongle, Xixiang Subdistrict, Bao'an District, Shenzhen, Guangdong, China
Applicant's name.....:	HUIZHOU OWIRE CO., LTD.
Address.....:	Floor 4-6, Building 6, Ericsson Science and Technology Industrial Park, No. 19, Huifeng East 1st Road, Zhongkai High-tech Zone, Huizhou City, Guangdong Province, P.R. China
Manufacturer's name.....	HUIZHOU OWIRE CO., LTD.
Address.....:	Floor 4-6, Building 6, Ericsson Science and Technology Industrial Park, No. 19, Huifeng East 1st Road, Zhongkai High-tech Zone, Huizhou City, Guangdong Province, P.R. China
EUT .....:	FIBER OPTICAL CABLE
Model Number.....:	FTTH INDOOR CABLE, FTTH DROP CABLE, FIBER OPTICAL PATCH CORD, DISTRIBUTION CABLE
Trade Mark.....:	OWIRE
Date of Receipt: .....:	2025-07-19
Date of Test: .....:	2025-07-19 to 2025-07-25
Test Method.....:	Please refer to next page(s).
Test Conclusion:	
Tested sample.....:	Tested component of Submitted sample
Standard.....:	RoHS Directive 2011/65/EU with amendment (EU) 2015/863
Result.....:	Pass

Remark.....:	According to customer's requirements, according to ROHS Directive 2011/65/EC Appendix II Amendment Directive (EU) 2015/863, samples were screened by IEC 62321-3-1:2013 for XRF scanning, and samples exceeding the screening limit were further confirmed by chemical testing methods for Cadmium, Lead, Mercury, Cr(VI), PBBs, PBDEs, DBP, BBP, DEHP, DIBP

Signed for and on behalf of

APPROVED

Daniel Wan

Approved Signatory

Test Requested and Conclusion(s):

No.	Standard and Requirement	Conclusion(s)
1	RoHS Directive 2011/65 / EU - XRF scanning	PASS
2	RoHS Directive 2011/65/EU and its subsequent amendments (EU) 2015/863 - Pb/Cd/Hg/CrVI Content - Polybrominated diphenyl ethers(PBDEs) - Polybrominated biphenyls (PBBs) - Phthalates	PASS

Sample Description:

Sample No.	Description
1	Metal wire
2	Grey wire skin

1. XRF scanning test results:

XRF Scanning - RoHS Directive 2011/65 / EU

Methods: IEC 62321-3-1:2013 analysis by X-ray fluorescence spectrometry (XRF).

No.	Results of XRF					Chemical confirmation results (mg/kg)	Conclusion
	Pb	Cd	Hg	Cr	Br	--	Pass
1	BL	BL	BL	BL	--	--	Pass
2	BL	BL	BL	BL	BL	--	Pass

XRF Screening limits for different matrices:

Materials	Concentration (mg/kg)				
	Cd	Cr	Pb	Hg	Br
Polymeric	BL≤60<X<140≤OL	BL≤640<X	BL≤670<X<1330≤OL	BL≤660<X<1340≤OL	BL≤290<X
Metallic	BL≤60<X<140≤OL	BL≤640<X	BL≤670<X<1330≤OL	BL≤660<X<1340≤OL	--
Composite materials	BL≤40<X<160≤OL	BL≤440<X	BL≤470<X<1530≤OL	BL≤460<X<1540≤OL	BL≤240<X

Note:

---BL= Below Limit

---OL=Over Limit

---X **=** inconclusive, the region where need further chemical testing by ICP-OES (for Pb, Cd, Hg), UV-Vis (for Cr(VI)) and GC-MS (for PBBs, PBDEs).

--- = Not Applicable

--- mg/kg=milligrams per kilogram

--- N.D.=Not Detected(<MDL)

--- MDL= Method Detection Limit

--- Negative = Absence of Cr(VI), the detected Cr(VI) concentration in the boiling water extraction solution is less than

--- 0.02 mg/kg with 50cm^2 sample surface area used.

--- *=According to 2011/65/EU Annex, point *Lead as an alloying element is steel containing up to 0.35% lead by weight, aluminum containing up to 0.4% lead by weight and as a copper alloy, containing up to 4% lead by weight can be exempted.

2. Chemical confirmation test methods:

Test Method:

A. Disassembly, disjointment and mechanical sample preparation.
—Ref. to IEC 62321-2:2021, Disassembly, disjointment and mechanical sample preparation.

B. With reference to IEC 62321-1:2013, tests were performed for the samples indicated by the photos in this report.

(1) Screening – Lead, mercury, cadmium, total chromium and total bromine
—Ref. to IEC 62321-3-1:2013, Screening for Lead, mercury, cadmium, total chromium and total bromine by X-ray fluorescence spectrometry.

(2) Wet chemical test method

Test Item(s)	Test Method	Reference	Unit	Limit	MDL
Mercury(Hg)	IEC 62321-4:2013+AMD1:2017	ICP-OES	mg/kg	1000	2
Cadmium(Cd)	IEC 62321-5:2013	ICP-OES	mg/kg	100	2
Lead(Pb)	IEC 62321-5:2013	ICP-OES	mg/kg	1000	2
PBBs (Next form)	IEC 62321-6:2015	GC-MS	mg/kg	1000	5
PBDEs (Next form)	IEC 62321-6:2015	GC-MS	mg/kg	1000	5
Hexavalent Chromium(CrVI) (Metal)	IEC 62321-7-1:2015	UV-Vis	$\mu g/cm^2$	0.13	0.1
Hexavalent Chromium(CrVI) (Nonmetal)	IEC 62321-7-2:2017	UV-Vis	mg/kg	1000	8
Dibutyl Phthalate(DBP)	IEC 62321-8:2017	GC-MS	mg/kg	1000	30
Butyl benzyl phthalate (BBP)	IEC 62321-8:2017	GC-MS	mg/kg	1000	30
Di-(2-ethylhexyl) Phthalate(DEHP)	IEC 62321-8:2017	GC-MS	mg/kg	1000	30
Diisobutyl phthalate (DIBP)	IEC 62321-8:2017	GC-MS	mg/kg	1000	30

PBBs		PBDEs	
Monobromobiphenyl	Hexabromobiphenyl	Monobromodiphenyl ether	Hexabromodiphenyl ether
Dibromobiphenyl	Heptabromobiphenyl	Dibromodiphenyl ether	Heptabromodiphenyl ether
Tribromobiphenyl	Octabromobiphenyl	Tribromodiphenyl ether	Octabromodiphenyl ether
Tetrabromobiphenyl	Nonabromobiphenyl	Tetrabromodiphenyl ether	Nonabromodiphenyl ether
Pentabromobiphenyl	Decabromobiphenyl	Pentabromodiphenyl ether	Decabromodiphenyl ether

Test Result:

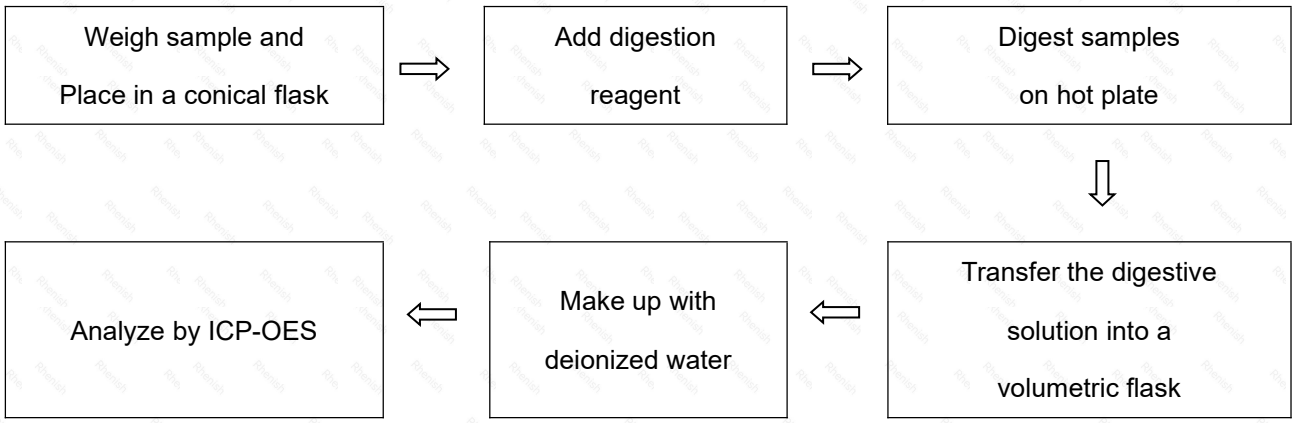
Test Item(s)	No.1	No.2	Conclusion
Cadmium (Cd)	N.D.	N.D.	Pass
Lead (Pb)	N.D.	N.D.	Pass
Mercury (Hg)	N.D.	N.D.	Pass
Hexavalent Chromium (CrVI)	N.D.	N.D.	Pass
PBBs	--	N.D.	Pass
PBDEs	--	N.D.	Pass
Dibutyl Phthalate (DBP)	--	N.D.	Pass
Butyl benzyl phthalate (BBP)	--	N.D.	Pass
Di-(2-ethylhexyl) Phthalate(DEHP)	--	N.D.	Pass
Diisobutyl phthalate (DIBP)	--	N.D.	Pass

Note:

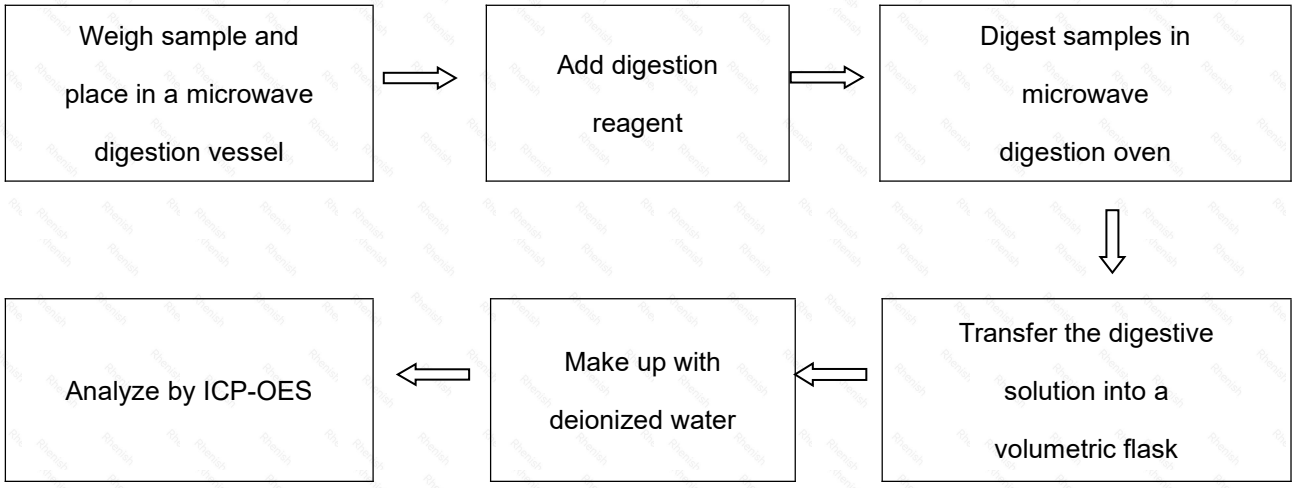
1. mg/kg= ppm
2. N.D.= Not Detected(<MDL)
3. MDL = Method Detection Limit
4. -- = No Testing
5. when Cr(VI) in a sample is detected below the 0.10 μg/cm^2 LOQ (limit of quantification), the sample is considered to be negative for Cr(VI). Since Cr(VI) may not be uniformly distributed in the coating even within the same sample batch, a "grey zone" between 0.10 μg/cm^2 and 0.13 μg/cm^2 has been established as "inconclusive" to reduce inconsistent results due to unavoidable coating variations. In this case, additional testing may be necessary to confirm the presence of Cr(VI). When Cr(VI) is detected above 0.13 μg/cm^2, the sample is considered to be positive for the presence of Cr(VI) in the coating layer. unavoidable coating variations may influence the determination 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.

Test Process:

1. Test for Cd/Pb Content

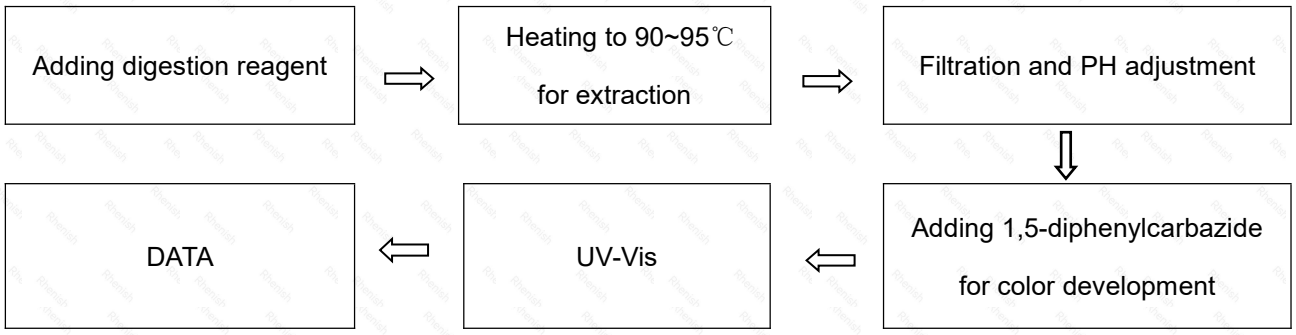


2. Test for Hg Content

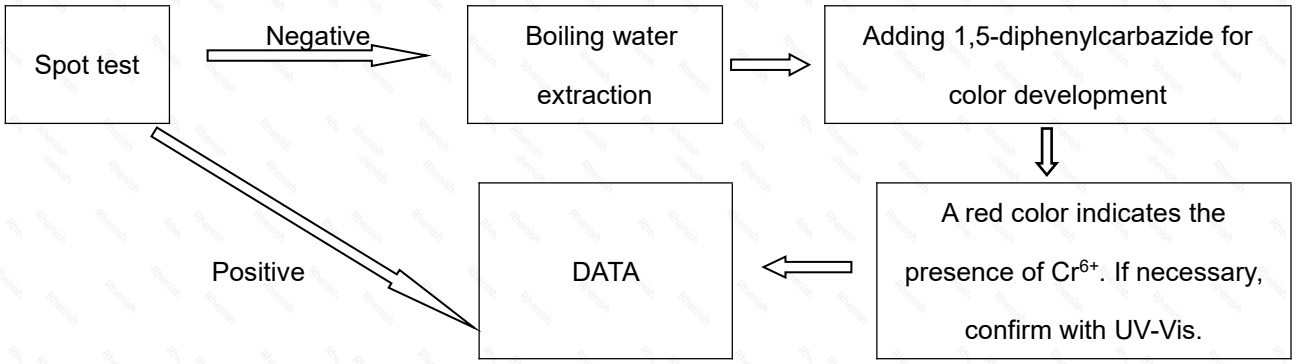


3. Test for Chromium (VI) Content

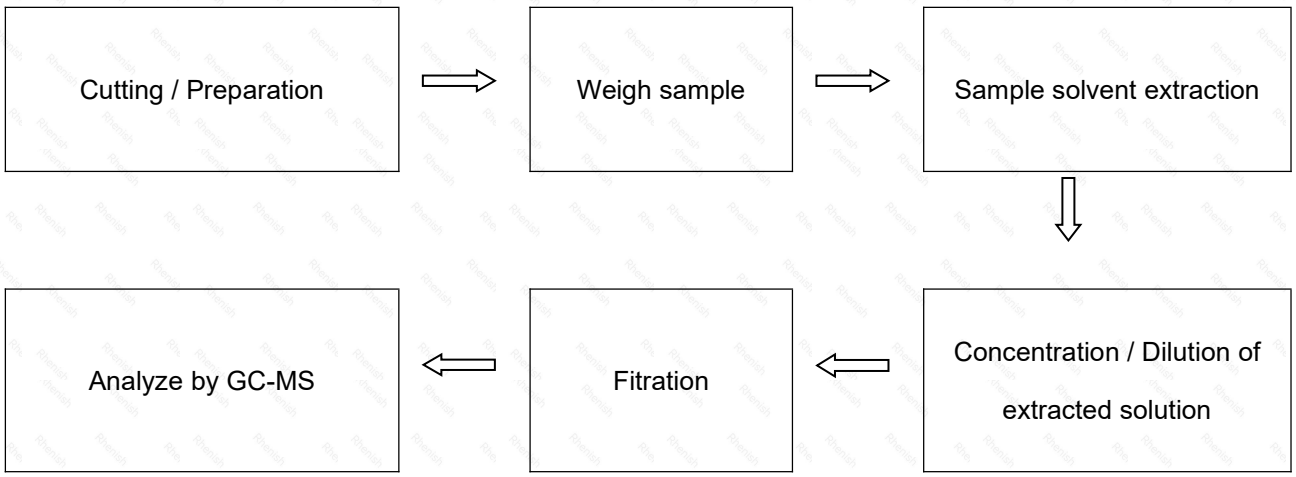
Nonmetal material



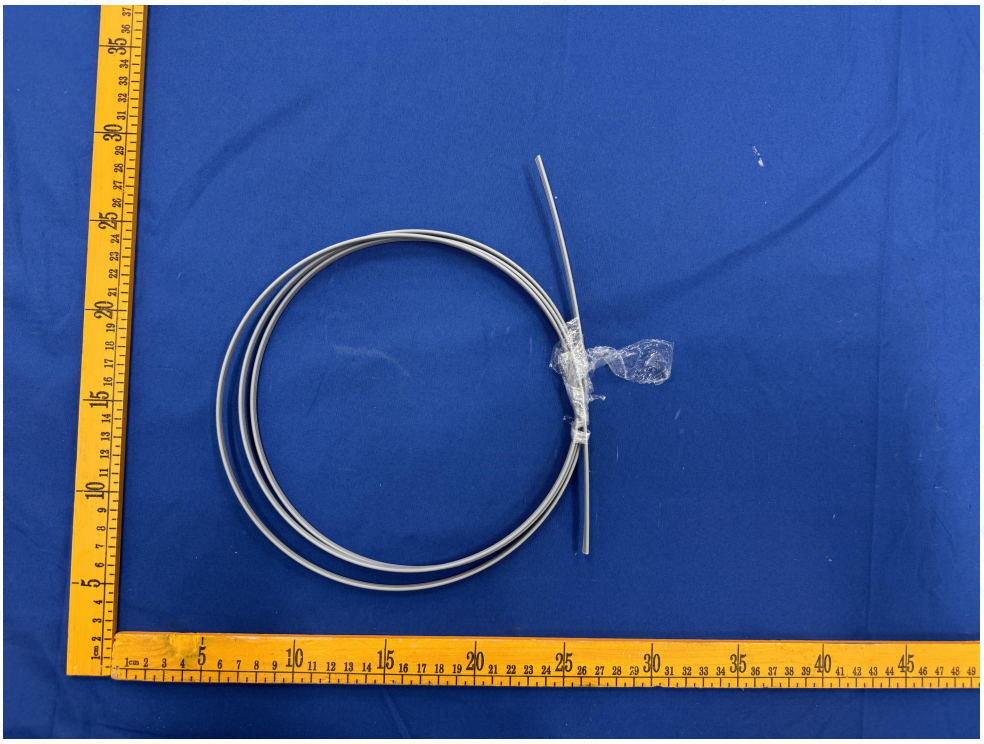
Metal material



4. Test for DBP, BBP, DEHP, DIBP, PBB, PBDE Content



Sample Photo:

Photo
Description: Overall view


*** End of Report ***