

# Test Report

No.: CANEC24025226801

Date: Nov 26, 2024

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Client Name: 3F ELECTRONICS INDUSTRY CORP.,LTD .

Client Address: NO.5, ZHENXING ROAD, LIYUHE INDUSTRY PARK, LOUCUN VILLAGE, GONGMING STREET, GUANGMING NEW DISTRICT, SHENZHEN, GUANGDONG , CHINA

Sample Name: XLPO wire and cable

Model No.: UL3321 16AWG black

Client Ref. Information: Please see Attachment

The above sample(s) and information were provided by the client.

SGS Job No.: SZP24-049571

Sample Receiving Date: Nov 12, 2024

Testing Period: Nov 12, 2024 ~ Nov 18, 2024

Test Requested: Select test(s) as requested by the client.

Test Method(s): Please refer to next page(s).

Test Result(s): Please refer to next page(s).

Test Requirement	Conclusion
EU RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU - Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBB), Polybrominated diphenyl ethers (PBDE), Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) and Diisobutyl phthalate (DIBP)	Pass

Signed for and on behalf of  
SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch

*Jessie Li*

Jessie-JX Li  
Approved Signatory

scan to see the report



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**Test Result(s):**

**Test Part Description:**

SN ID	Sample No.	SGS Sample ID	Description
SN1	A1	CAN24-0252268-0001.C001	Black plastic jacket

**Remarks:**

- (1) 1 mg/kg = 1 ppm = 0.0001%
- (2) MDL = Method Detection Limit
- (3) ND = Not Detected (< MDL)
- (4) "-" = Not Regulated

**EU RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU - Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBB), Polybrominated diphenyl ethers (PBDE), Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) and Diisobutyl phthalate (DIBP)**

**Test Method:** With reference to IEC 62321-4:2013+AMD1:2017, IEC 62321-5:2013, IEC 62321-7-2:2017 and IEC 62321-12:2023, analysis was performed by ICP-OES/AAS, UV-Vis and GC-MS.

Test Item(s)	Limit	Unit(s)	MDL	A1
Lead (Pb)	1000	mg/kg	2	ND
Mercury (Hg)	1000	mg/kg	2	ND
Cadmium (Cd)	100	mg/kg	2	ND
Hexavalent Chromium (Cr(VI))	1000	mg/kg	8	ND
Polybrominated biphenyls (PBB)	1000	mg/kg	-	ND
Monobrominated biphenyl (MonoBB)	-	mg/kg	25	ND
Dibrominated biphenyl (DiBB)	-	mg/kg	25	ND
Tribrominated biphenyl (TriBB)	-	mg/kg	25	ND
Tetrabrominated biphenyl (TetraBB)	-	mg/kg	25	ND
Pentabrominated biphenyl (PentaBB)	-	mg/kg	25	ND
Hexabrominated biphenyl (HexaBB)	-	mg/kg	25	ND
Heptabrominated biphenyl (HeptaBB)	-	mg/kg	25	ND
Octabrominated biphenyl (OctaBB)	-	mg/kg	25	ND
Nonabrominated biphenyl (NonaBB)	-	mg/kg	25	ND
Decabrominated biphenyl (DecaBB)	-	mg/kg	25	ND
Polybrominated diphenyl ethers (PBDE)	1000	mg/kg	-	ND
Monobrominated diphenyl ether (MonoBDE)	-	mg/kg	25	ND
Dibrominated diphenyl ether (DiBDE)	-	mg/kg	25	ND
Tribrominated diphenyl ether (TriBDE)	-	mg/kg	25	ND
Tetrabrominated diphenyl ether (TetraBDE)	-	mg/kg	25	ND
Pentabrominated diphenyl ether (PentaBDE)	-	mg/kg	25	ND
Hexabrominated diphenyl ether (HexaBDE)	-	mg/kg	25	ND
Heptabrominated diphenyl ether (HeptaBDE)	-	mg/kg	25	ND



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Test Item(s)	Limit	Unit(s)	MDL	A1
Octabrominated diphenyl ether (OctaBDE)	-	mg/kg	25	ND
Nonabrominated diphenyl ether (NonaBDE)	-	mg/kg	25	ND
Decabrominated diphenyl ether (DecaBDE)	-	mg/kg	25	ND
Di-2-Ethyl Hexyl Phthalate (DEHP)	1000	mg/kg	50	ND
Benzyl Butyl Phthalate (BBP)	1000	mg/kg	50	ND
Dibutyl Phthalate (DBP)	1000	mg/kg	50	ND
Diisobutyl Phthalate (DIBP)	1000	mg/kg	50	ND

**Notes:**

- (1) The maximum permissible limit is quoted from RoHS Directive (EU) 2015/863.
- (2) IEC 62321 series is equivalent to EN 62321 series.
- (3) The restriction of DEHP, BBP, DBP and DIBP shall apply to medical devices, including in vitro medical devices, and monitoring and control instruments, including industrial monitoring and control instruments, from 22 July 2021.

Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule (w=0) stated in ILAC-G8:09/2019.



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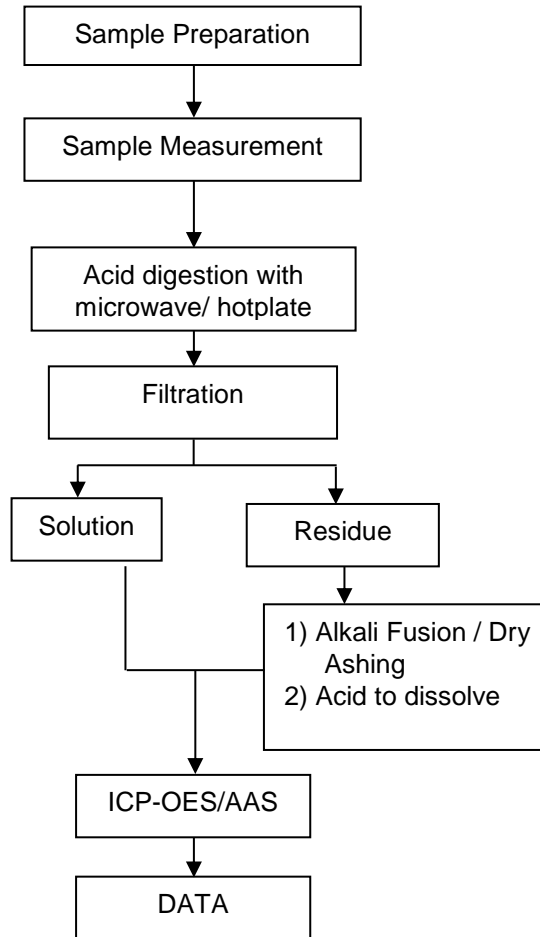
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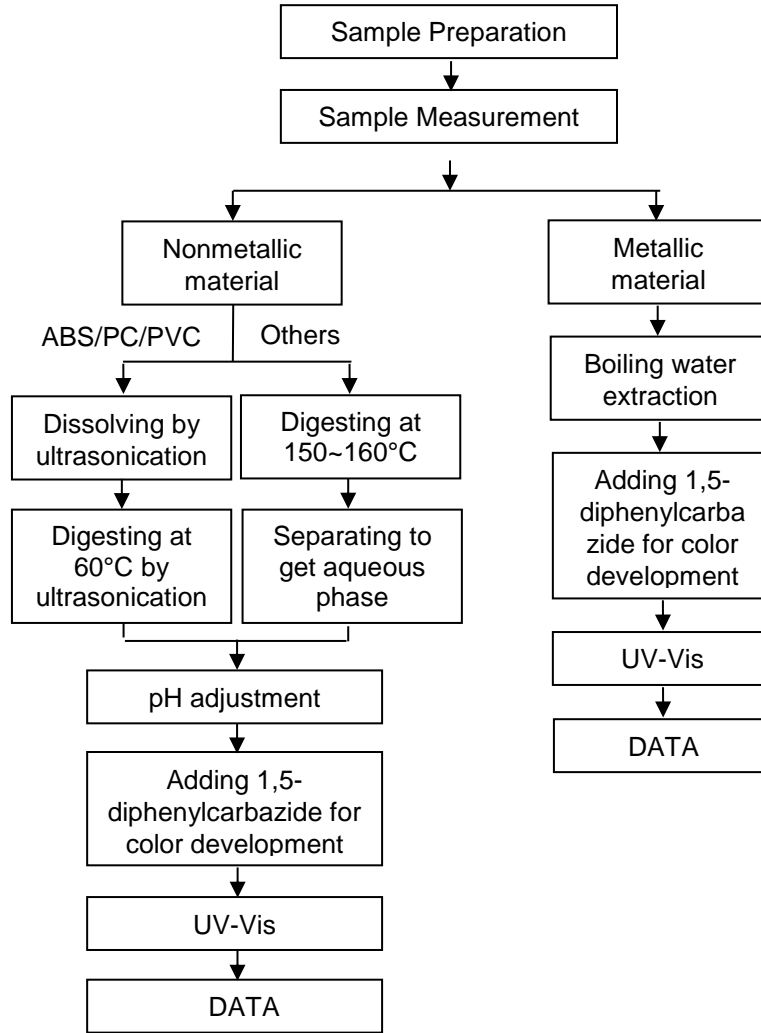
**Elements Testing Flow Chart**

These samples were dissolved totally by pre-conditioning method according to below flow chart.



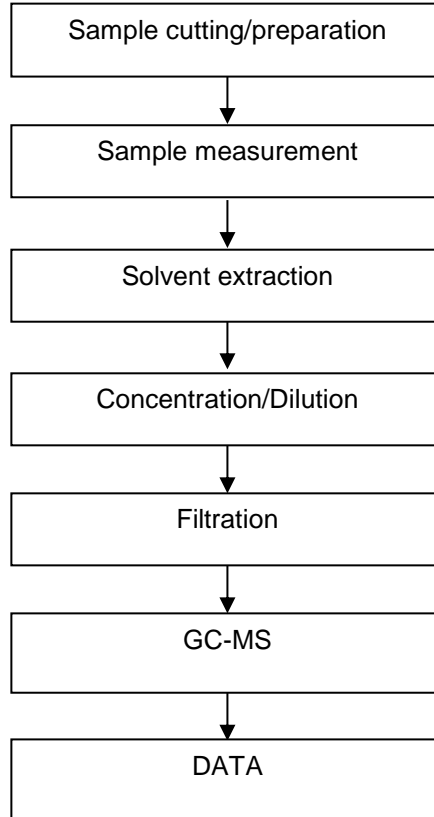
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**Hexavalent Chromium (Cr(VI)) Testing Flow Chart**



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**PBB/PBDE/Phthalates Testing Flow Chart**



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### Attachment:

1385、1505、1764、2679、3194、3195、3196、3199、3302、3312、3368、3376、  
3377、3385、3456、3463、3464、3564、3167、3173、3182、3236、3265、3266、  
3271、3288、HP3239、3289、3290、3295、3297、3298、3300、3301、3320、3321、  
3328、3331、3343、3344、3346、3351、3352、3386、3398、3415、3417、3423、  
3424、3435、3436、3440、3447、3448、3469、3472、3473、3485、3491、3492、  
3505、3569、3584、3596、3597、3598、3599、3613、3633、3688、3691、4413、  
10368、10193、10266、1914、2951、10530、20346、3406、3613、3633、3816、  
3817、10267、RHH、XHHW、RHW-2、SIS、XHH、XHHW、XHHW-2、QFR-10634、  
QFR-11092、FLR12Y、FLR13Y、QB-C、QB-D、FL2X、FLR2X、FLR31Y、FLU2X-A、  
FHLR2X-B、FLR21X-A、QFR-XNY、EEHX、FHLR91X-A、FHLR91X-B、FLR2Y-A、  
QCB-C、ATEEX、WXC、HDPE、FL2Y、QFR-0815、QFR-125、GXL、SXL、TXL、SGX、  
GPTH、JYJ-125、JYJ-150、AEX、AESSX、H05Z-K、H07Z-K、QFR-0818、QFR-1011、  
QFR-1412、QFR-1920、WDZ-YJY、QFR-1920、JET3173、JET3266、JET3385、JET3386、  
JET10368、JET1385、MIL-W-81044-6、MIL-W-81044-12、16878-10E、16878-14B、  
16878-15B、16878-16C、16878-36、QBJ-C、DCEK、CHFUS、EV、FHLR9Y、FLALR2X、  
T3、FL42X、E-105/T、TX、TY、YN/XLPO 150V,300V,600V; E-125/TX、TY、  
YN/XLPO 150V,300V,600V; E-150/TX、TY、TN/XLPO 150V,300V,600V; CQC XLPE WIRE;  
AND XLPE TUBE AND XLPE WIRE AND CABLE SERIES



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### Sample Photo:



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