

**Test Report** No.: SZXEC24003000703 **Date**: Sep 26, 2024 Page 1 of 7

Client Name: DONGGUAN BEST ALLOYS CO., LTD

Client Address: ROOM 101 NO.1 FUJIN WEST ROAD, HUANGCAOLANG, DALANG TOWN, DONGGUAN,

GUANGDONG, CHINA

Sample Name: Lead-free Solder Wire

Model No.: SnCu

Client Ref. Information: BTL-305 series、BTL-405 series、BTL-300 series、

BTL-205 series、BTL-105 series、BTL-0507 series、BTL-0307 series、BTL-0300 series、BTL-99307 series、BTL-99703 series、BTL-999 series、BTL-9985series、BTL-4258 series、BTL-64351 series、BTL-3503 series、BTL-42571 series、BTL-955 series、BTL-9010 series、BTL-8812 series、BTL-97-3 series、BTL-98-2 series、SnCu series、SnCuNi series、SnAgCu series、SnBi series、

SnBiAg series lead-free solder preforms series

SnAgCuSb series BABBITT Alloy

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

SGS Job No.: SZP24-041518 Sample Receiving Date: Sep 20, 2024

Testing Period: Sep 20, 2024 ~ Sep 26, 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	Pass
(DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) and Diisobutyl	
phthalate (DIBP)	

Signed for and on behalf of

SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Fay

Fay Yuan

Approved Signatory





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**Test Report** No.: SZXEC24003000703 **Date:** Sep 26, 2024 Page 2 of 7

### Test Result(s):

Test Part Description:

SN ID	Sample No.	SGS Sample ID	Description
SN1	A1	SZX24-0030007-0001.C001	Silver-gray metal wire with powder

#### 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	53
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)	1	mg/kg	25	ND
Dibrominated biphenyl (DiBB)	1	mg/kg	25	ND
Tribrominated biphenyl (TriBB)	1	mg/kg	25	ND
Tetrabrominated biphenyl (TetraBB)	1	mg/kg	25	ND
Pentabrominated biphenyl (PentaBB)	1	mg/kg	25	ND
Hexabrominated biphenyl (HexaBB)	1	mg/kg	25	ND
Heptabrominated biphenyl (HeptaBB)	1	mg/kg	25	ND
Octabrominated biphenyl (OctaBB)	-	mg/kg	25	ND
Nonabrominated biphenyl (NonaBB)	1	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)	1	mg/kg	25	ND
Pentabrominated diphenyl ether (PentaBDE)	1	mg/kg	25	ND
Hexabrominated diphenyl ether (HexaBDE)	-	mg/kg	25	ND
Heptabrominated diphenyl ether (HeptaBDE)	-	mg/kg	25	ND
Octabrominated diphenyl ether (OctaBDE)	-	mg/kg	25	ND



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**Test Report** No.: SZXEC24003000703 **Date:** Sep 26, 2024 Page 3 of 7

Test Item(s)	Limit	Unit(s)	MDL	A1
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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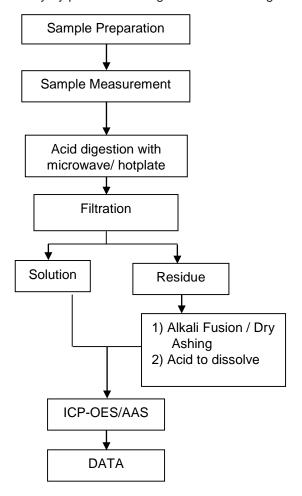


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No.: SZXEC24003000703 **Date:** Sep 26, 2024 Page 4 of 7

# **Elements Testing Flow Chart**

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





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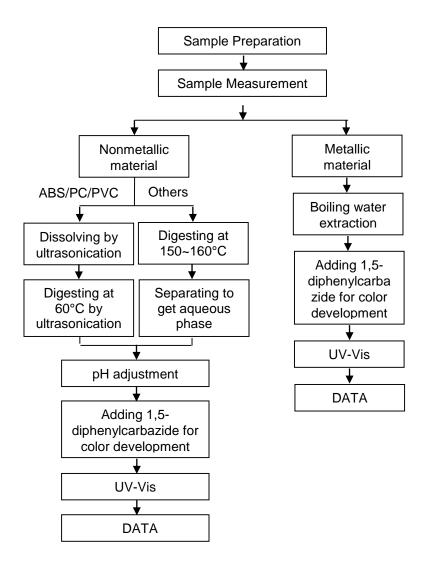
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### Hexavalent Chromium (Cr(VI)) Testing Flow Chart





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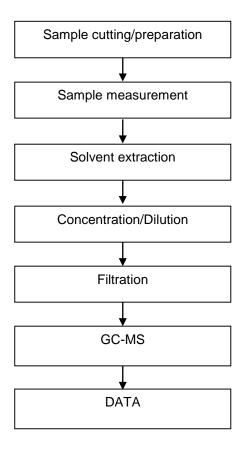
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## PBB/PBDE/Phthalates Testing Flow Chart





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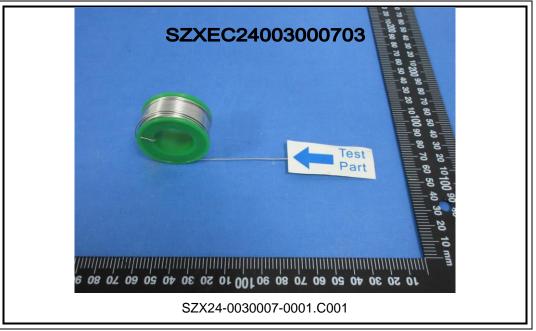
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Sample Photo:



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