



**Test Report** No.: SHAEC22004422301 **Date**: Dec 09, 2022 Page 1 of 8

Client Name: DONGGUAN EASY-GATHER ELECTRONIC CO.,LTD

Client Address: BUILDING 3, 9 YINHU ROAD, SANGYUAN, DONGCHENG STREET, DONGGUAN

CITY, GUANGDONG PROVINCE, CHINA

Sample Name: CERAMIC DISC CAPACITOR (epoxy resin coating)

Main Substance: body(epoxy resin coating w/black printing;ceramic disc);pin(silvery metal pin)

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

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SGS Job No.: CP22-064784 Sample Receiving Date: Dec 05, 2022

Testing Period: Dec 05, 2022 - Dec 09, 2022

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	Pass
2011/65/EU- Lead, Mercury, Cadmium and Hexavalent chromium	F d 5 5
EU RoHS Directive (EU) 2015/863 amending Annex II to Directive	
2011/65/EU- Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated	
biphenyls (PBBs), Polybrominated diphenyl ethers (PBDEs), Dibutyl phthalate	Pass
(DBP), Butyl benzyl phthalate (BBP), Bis(2-ethylhexyl) phthalate (DEHP),	
and Diisobutyl phthalate (DIBP)	

Signed for and on behalf of SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.



Dora Hu 胡敏 Approved Signatory



This report is English version of SHAEC22004422302.



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#### Test Result(s):

Test Part Description:

SN ID	Sample No.	SGS Sample ID	Description
SN1	1	SHA22-0044223-0001.C001	Blue solid part
SN2	2	SHA22-0044223-0001.C002	Silver metal pin part

#### 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 and Hexavalent chromium** Test Method:

With reference to IEC 62321-4:2013+AMD1:2017, IEC 62321-5:2013 and IEC 62321-7-

1:2015, analysis was performed by ICP-OES, AAS and UV-Vis.

Test Item(s)	Limit	Unit(s)	MDL	2
Cadmium(Cd)	100	mg/kg	2	ND
Lead(Pb)	1000	mg/kg	2	ND
Mercury(Hg)	1000	mg/kg	2	ND
Hexavalent Chromium (Cr(VI))▼	-	μg/cm²	0.10	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) ▼ = a. The sample is positive for Cr(VI) if the Cr(VI)concentration is greater than 0.13 µg/cm<sup>2</sup>. The sample coating is considered to contain Cr(VI)
  - b. The sample is negative for Cr(VI) if Cr(VI) is ND (concentration less than 0.10 µg/cm<sup>2</sup>). The coating is considered a non-Cr(VI) based coating
  - c. The result between 0.10 µg/cm<sup>2</sup> and 0.13 µg/cm<sup>2</sup> is considered to be inconclusive 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.

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

Test Method: With reference to IEC 62321-4:2013+AMD1:2017, IEC 62321-5:2013, IEC 62321-7-2:2017,

IEC 62321-6:2015 and IEC 62321-8:2017, analysis was performed by ICP-OES, AAS,

UV-Vis and GC-MS.

Test Item(s)	Limit	Unit(s)	MDL	1
Cadmium(Cd)	100	mg/kg	2	ND



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	,	11 '4/ \	MDI	4
Test Item(s)	Limit	Unit(s)	MDL	1
Lead (Pb)	1000	mg/kg	2	ND
Mercury (Hg)	1000	mg/kg	2	ND
Hexavalent Chromium (Cr(VI))	1000	mg/kg	8	ND
Polybromobiphenyl (PBBs)	1000	mg/kg	-	ND
Monobromobiphenyl (MonoBB)	-	mg/kg	5	ND
Dibromobiphenyl (DiBB)	-	mg/kg	5	ND
Tribromobiphenyl (TriBB)	-	mg/kg	5	ND
Tetrabromobiphenyl (TetraBB)	ı	mg/kg	5	ND
Pentabromobiphenyl (PentaBB)	-	mg/kg	5	ND
Hexabromobiphenyl (HexaBB)	1	mg/kg	5	ND
Heptabromobiphenyl (HeptaBB)		mg/kg	5	ND
Octabromobiphenyl (OctaBB)	<u>-</u>	mg/kg	5	ND
Nonabromobiphenyl (NonaBB)		mg/kg	5	ND
Decabromobiphenyl (DecaBB)	>>	mg/kg	5	ND
Polybromodiphenyl ether(PBDEs)	1000	mg/kg	-	ND
Monobromodiphenylether (MonoBDE)	-	mg/kg	5	ND
Dibromodiphenylether (DiBDE)	-	mg/kg	5	ND
Tribromodiphenylether (TriBDE)	-	mg/kg	5	ND
Tetrabromodiphenylether (TetraBDE)	ı	mg/kg	5	ND
Pentabromodiphenylethers (PentaBDE)	-	mg/kg	5	ND
Hexabromodiphenylether (HexaBDE)	-	mg/kg	5	ND
Heptabromodiphenylether (HeptaBDE)	-	mg/kg	5	ND
Octabromodiphenylethers (OctaBDE)	-	mg/kg	5	ND
Nonabromodiphenylether (NonaBDE)	-	mg/kg	5	ND
Decabromodiphenylether (DecaBDE)	-	mg/kg	5	ND
Dibutyl Phthalate(DBP)	1000	mg/kg	50	ND
Benzyl Butyl Phthalate(BBP)	1000	mg/kg	50	ND
Bis-(2-ethylhexyl) Phthalate(DEHP)	1000	mg/kg	50	ND
Diisobutyl Phthalate(DIBP)	1000	mg/kg	50	ND

- (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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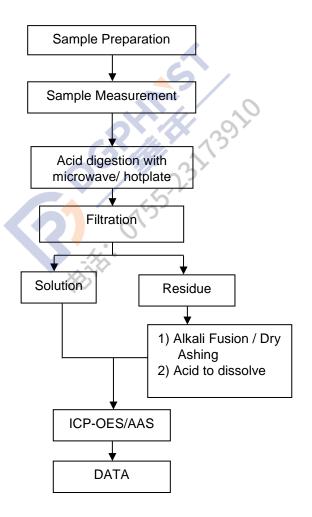
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### **Elements Testing Flow Chart**

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





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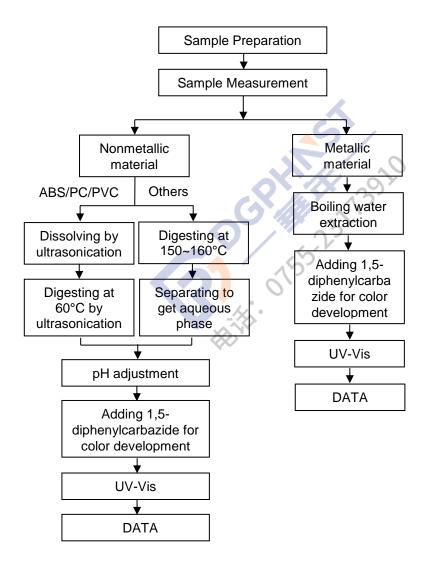
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#### Hexavalent Chromium (Cr(VI)) Testing Flow Chart





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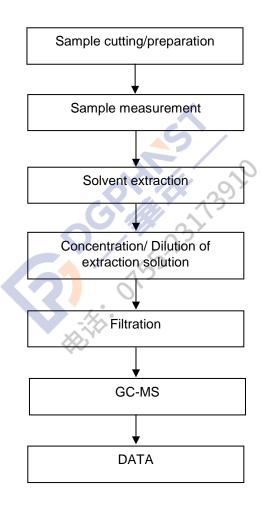
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#### PBBs/PBDEs Testing Flow Chart





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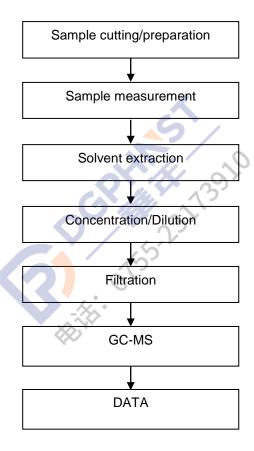


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#### **Phthalates Testing Flow Chart**





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Sample Photo:





SGS authenticate the photo on original report only \*\*\* End of Report \*\*\*



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