

# Test Report

No.: SZXEC23002607101

Date: Nov 08, 2023

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Client Name: SHENZHEN HALNZIYE ELECTRONICS CO. LTD.

Client Address: 3-4/F BLD.D HEHENGXING SCI & TECH PARK ,NO.19 MINQING ROADLONGHUA DISTRICT ,SHENZHEN

Sample Name: THERMAL GREASE

Client Ref. Information: HY410、HY420、HY430、HY450、HY460、HY450L、HY510、HY520、HY530、HY550、HY610、HY620、HY630、HY650、HY710、HY720、HY730、HY750、HY810、HY810A、HY810B、HY810C、HY810L、HY880、HY881、HY882、HY883、HY214、HY224、HY234、HY244、HY254、HY216、HY226、HY236、HY246、HY256、HY218、HY228、HY238、HY248、HY258、HY268、HY300(series)、HY-1(series)、HY-2(series)、HY-3(series)、HY-STG(series)、HY-910(series)、HY-A8、HY-A9、HY-T1(series)、HY-P series Mixture、HY-P7、HY-P11、HY-P13、HY-P14、HY-P15、HY-P16、HY-CE series Mixture、HY530PI、HY530BL、HM400(series)、HM401、HM402、HM403、HM500(series)、HM501、HM502、HM503、HM600(series)、HM601、HM602、HM603、HM700(series)、HM706、HM707、HM800(series)、HM801、HM802、HM803、HM805、HM806、HM901(series)、HY402、HY503、HY603、HY801、HY802

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

SGS Job No.: SZP23-024198

Sample Receiving Date: Oct 25, 2023

Testing Period: Oct 25, 2023 ~ Oct 31, 2023

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 (PBBs), Polybrominated diphenyl ethers (PBDEs), 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. Shenzhen Branch

Mescal Ye  
Approved Signatory

scan to see the report



803A3304



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Shenzhen Branch Testing Center Chemical Laboratory

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**Test Result(s):**

Test Part Description:

SN ID	Sample No.	SGS Sample ID	Description
SN1	A1	SZX23-0026071-0001.C001	Grey paste

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 (PBBs), Polybrominated diphenyl ethers (PBDEs), 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, IEC 62321-6:2015 and IEC 62321-8:2017, analysis was performed by ICP-OES, UV-Vis and GC-MS.

Test Item(s)	Limit	Unit(s)	MDL	A1
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))	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)	-	mg/kg	5	ND
Pentabromobiphenyl (PentaBB)	-	mg/kg	5	ND
Hexabromobiphenyl (HexaBB)	-	mg/kg	5	ND
Heptabromobiphenyl (HeptaBB)	-	mg/kg	5	ND
Octabromobiphenyl (OctaBB)	-	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)	-	mg/kg	5	ND
Pentabromodiphenylether (PentaBDE)	-	mg/kg	5	ND
Hexabromodiphenylether (HexaBDE)	-	mg/kg	5	ND
Heptabromodiphenylether (HeptaBDE)	-	mg/kg	5	ND
Octabromodiphenylether (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
BenzyI Butyl Phthalate(BBP)	1000	mg/kg	50	ND



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Test Item(s)	Limit	Unit(s)	MDL	A1
Bis-(2-ethylhexyl) Phthalate(DEHP)	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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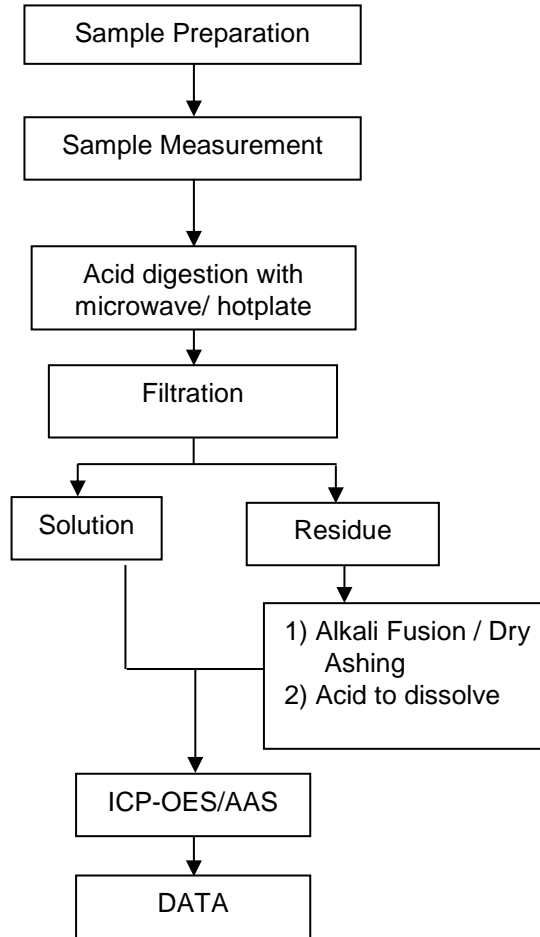
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**Elements Testing Flow Chart**

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



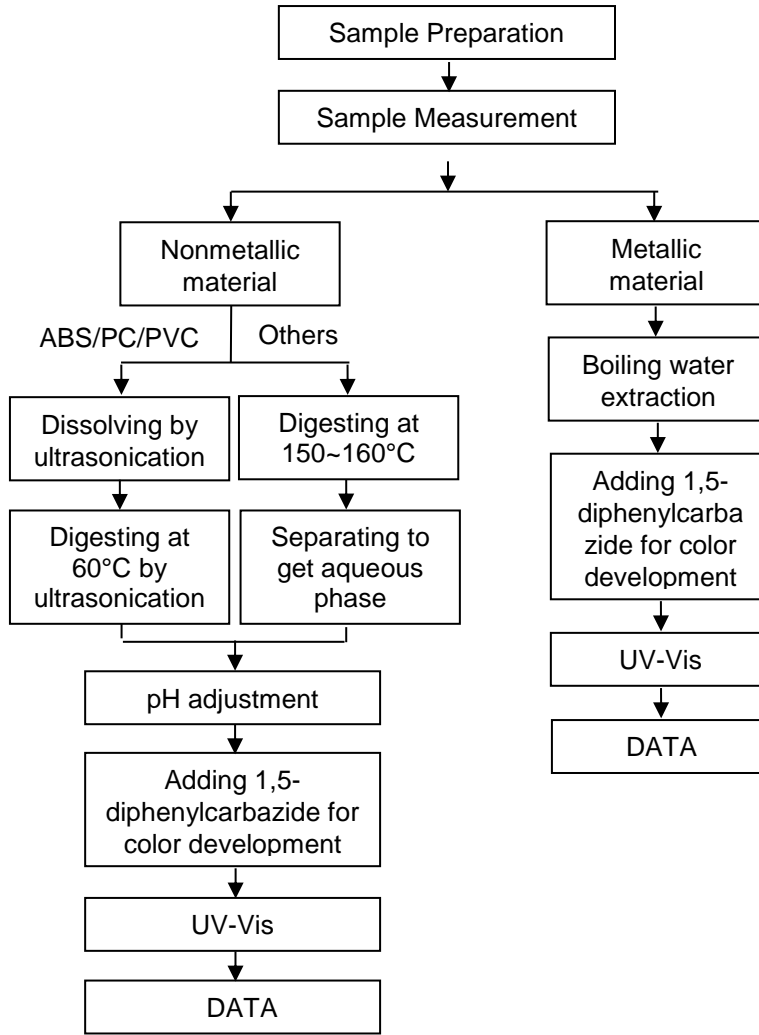
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**Hexavalent Chromium (Cr(VI)) Testing Flow Chart**



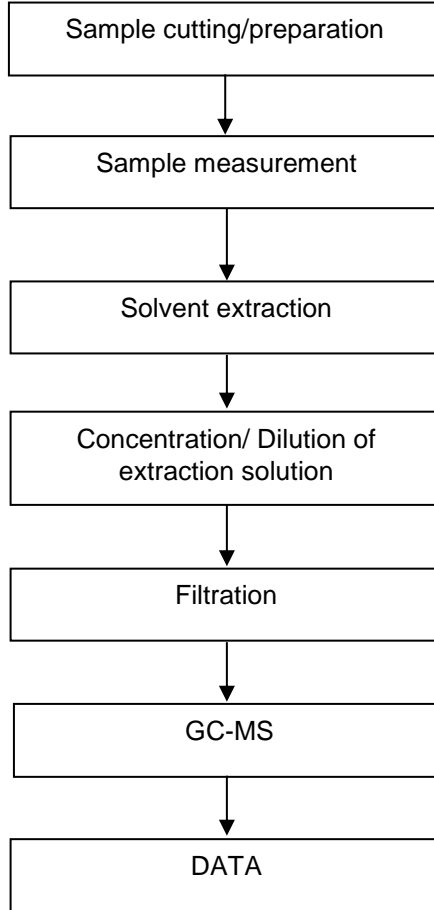
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**PBBs/PBDEs Testing Flow Chart**



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### Phthalates Testing Flow Chart



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Sample Photo:



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