

**Test Report No.**: CANPC24027189501 **Date**: Dec 11, 2024 Page 1 of 11

Client Name: CT MICRO ELECTRONICS XIA MEN LTD

Client Address: NO.1158, FANGSHAN SOUTH ROAD, XIAMEN TORCH HIGH TECH ZONE (XIANG'

AN)INDUSTRIAL AREA

Sample Name: Emitter/detector SMD TYPE
Other: Emitter/detector SMD TYPE

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

SGS Job No.: XMIN2412002977PC01

Sample Receiving Date: Dec 03, 2024

Testing Period: Dec 03, 2024 ~ Dec 11, 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
Chlorinated Paraffins	See Results
TBBPA	See Results
Halogen	See Results

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

Dongyu Xie

Approved Signatory



Verification: check.sgsonline.com.cn



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#### Test Result(s):

Test Part Description:

SN ID	Sample No.	SGS Sample ID	Description
SN1	001	CAN24-0271895-0001.C001	"Emitter/detector SMD TYPE"

#### 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,

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	001
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
Polybromobiphenyl (PBB)	1000	mg/kg	-	ND
Monobrominated biphenyl (MonoBB)	-	mg/kg	5	ND
Dibrominated biphenyl (DiBB)	-	mg/kg	5	ND
Tribrominated biphenyl (TriBB)	-	mg/kg	5	ND
Tetrabrominated biphenyl (TetraBB)	-	mg/kg	5	ND
Pentabrominated biphenyl (PentaBB)	-	mg/kg	5	ND
Hexabrominated biphenyl (HexaBB)	-	mg/kg	5	ND
Heptabrominated biphenyl (HeptaBB)	-	mg/kg	5	ND
Octabrominated biphenyl (OctaBB)	-	mg/kg	5	ND
Nonabrominated biphenyl (NonaBB)	-	mg/kg	5	ND
Decabrominated biphenyl (DecaBB)	-	mg/kg	5	ND
Polybromodiphenyl ether(PBDE)	1000	mg/kg	-	ND
Monobrominated diphenyl ether (MonoBDE)	-	mg/kg	5	ND
Dibrominated diphenyl ether (DiBDE)	-	mg/kg	5	ND
Tribrominated diphenyl ether (TriBDE)	-	mg/kg	5	ND
Tetrabrominated diphenyl ether (TetraBDE)	-	mg/kg	5	ND
Pentabrominated diphenyl ether (PentaBDE)	-	mg/kg	5	ND
Hexabrominated diphenyl ether (HexaBDE)	-	mg/kg	5	ND
Heptabrominated diphenyl ether (HeptaBDE)	-	mg/kg	5	ND



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Test Item(s)	Limit	Unit(s)	MDL	001
Octabrominated diphenyl ether (OctaBDE)	-	mg/kg	5	ND
Nonabrominated diphenyl ether (NonaBDE)	-	mg/kg	5	ND
Decabrominated diphenyl ether (DecaBDE)	-	mg/kg	5	ND
Bis(2-ethylhexyl) phthalate (DEHP)	1000	mg/kg	50	ND
Butyl benzyl 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.

#### **Chlorinated Paraffins**

Test Method: With reference to ISO 22818:2021, analysis was performed by GC-NCI-MS.

Test Item(s)	CAS No.	Unit(s)	MDL	001
Middle Chain Chlorinated Paraffins(MCCP)(C <sub>14</sub> -C <sub>17</sub> )	85535-85-9	mg/kg	50	ND

### **TBBPA**

**Test Method:** With reference to SGS in house method, analysis was performed by GC-MS or LC-MS or LC-MS/MS.

Test Item(s)	CAS No.	Unit(s)	MDL	001
Tetrabromobisphenol A(TBBP-A)	79-94-7	mg/kg	5	ND

#### <u>Halogen</u>

**Test Method:** With reference to EN 14582:2016, analysis was performed by IC.

Test Item(s)	Unit(s)	MDL	001
Fluorine(F)	mg/kg	20	814
Chlorine(Cl)	mg/kg	50	167
Bromine(Br)	mg/kg	50	ND
lodine(I)	mg/kg	50	ND

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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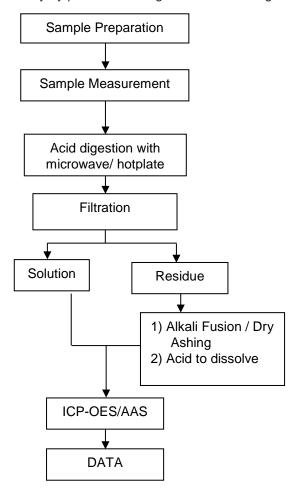
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### **Elements Testing Flow Chart**

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





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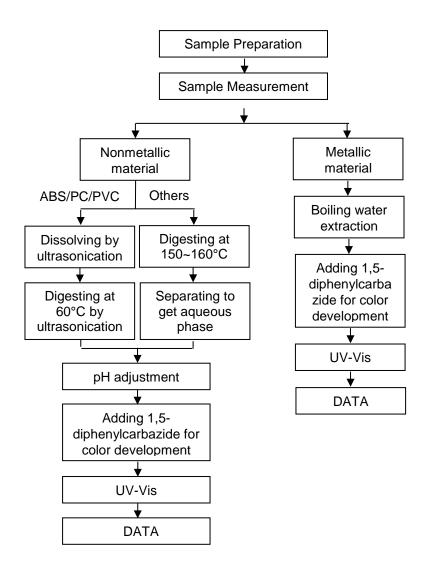


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#### Hexavalent Chromium (Cr(VI)) Testing Flow Chart





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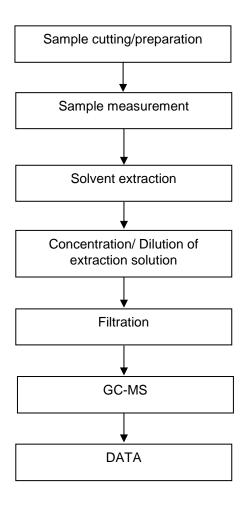
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#### **PBB/PBDE Testing Flow Chart**





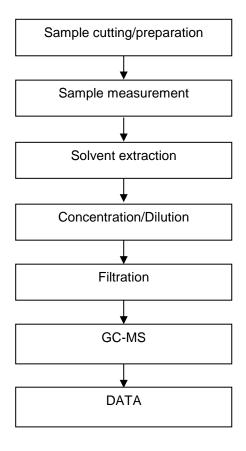
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### **Phthalates Testing Flow Chart**





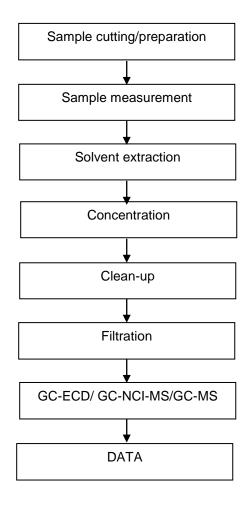
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### **Chlorinated Paraffin Testing Flow Chart**





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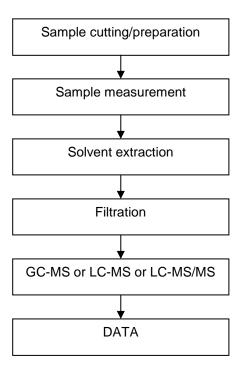
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#### **TBBP-A Testing Flow Chart**



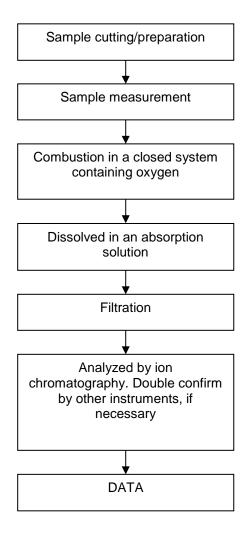


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### **Halogen Testing Flow Chart**





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Sample Photo:



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