



## Test Report

Report No. A2220247487101001

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**Company Name** GUANGDONG QUEENDOM GROUP TECHNOLOGY CO., LTD  
**shown on Report****Address** 302, NO.5, XINJI NORTH ROAD, DAFEN, WANJIANG STREET, DONGGUAN CITY,  
GUANGDONG PROVINCE**The following sample(s) and sample information was/were submitted and identified by/on the behalf  
of the applicant**

Sample Name Light-emitting diode  
Part No. 3MM Round, 5MM Round, 257 square, 2835, 0603  
Color white, red  
Sample Received Date Jun. 17, 2024  
Testing Period Jun. 17, 2024 to Jun. 21, 2024

**Test Requested** As specified by client, to test Lead (Pb), Cadmium (Cd), Mercury (Hg),  
Hexavalent Chromium (Cr(VI)), Polybrominated Biphenyls (PBBs),  
Polybrominated Diphenyl Ethers (PBDEs), Phthalates (DBP, BBP, DEHP, DIBP)  
in the submitted sample(s).**Test Method** Please refer to the following page(s).**Test Result(s)** Please refer to the following page(s).Franck Zhang

Reviewed by

Hill Zheng

Date

Jori Xia

Jun. 21, 2024

Hill Zheng  
Technical Manager

No. R228411511

Approved by

Centre Testing International Group Co.,Ltd.

CTI Building, Xing Dong Community, Xin'an Sub-district, Bao'an District, Shenzhen City, Guangdong Province, P.R. China

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## Test Method

Test Item(s)	Test Method	Measured Equipment(s)
Lead (Pb)	IEC 62321-5:2013	ICP-OES
Cadmium (Cd)	IEC 62321-5:2013	ICP-OES
Mercury (Hg)	IEC 62321-4:2013+AMD1:2017 CSV	ICP-OES
Hexavalent Chromium (Cr(VI))	IEC 62321-7-2:2017 and/or determination of Total Chromium by IEC 62321-5:2013	UV-Vis/ICP-OES
Polybrominated Biphenyls (PBBs)	IEC 62321-6:2015	GC-MS
Polybrominated Diphenyl Ethers (PBDEs)	IEC 62321-6:2015	GC-MS
Phthalates (DBP, BBP, DEHP, DIBP)	IEC 62321-8:2017	GC-MS

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## Test Result(s)

Tested Item(s)	Result	MDL
Lead (Pb)	N.D.	2 mg/kg
Cadmium (Cd)	N.D.	2 mg/kg
Mercury (Hg)	N.D.	2 mg/kg
Hexavalent Chromium (Cr(VI))	N.D.	8 mg/kg
Tested Item(s)	Result	MDL
<b>Polybrominated Biphenyls (PBBs)</b>		
Monobromobiphenyl	N.D.	5 mg/kg
Dibromobiphenyl	N.D.	5 mg/kg
Tribromobiphenyl	N.D.	5 mg/kg
Tetrabromobiphenyl	N.D.	5 mg/kg
Pentabromobiphenyl	N.D.	5 mg/kg
Hexabromobiphenyl	N.D.	5 mg/kg
Heptabromobiphenyl	N.D.	5 mg/kg
Octabromobiphenyl	N.D.	5 mg/kg
Nonabromobiphenyl	N.D.	5 mg/kg
Decabromobiphenyl	N.D.	5 mg/kg
Tested Item(s)	Result	MDL
<b>Polybrominated Diphenyl Ethers (PBDEs)</b>		
Monobromodiphenyl ether	N.D.	5 mg/kg
Dibromodiphenyl ether	N.D.	5 mg/kg
Tribromodiphenyl ether	N.D.	5 mg/kg
Tetrabromodiphenyl ether	N.D.	5 mg/kg
Pentabromodiphenyl ether	N.D.	5 mg/kg
Hexabromodiphenyl ether	N.D.	5 mg/kg
Heptabromodiphenyl ether	N.D.	5 mg/kg
Octabromodiphenyl ether	N.D.	5 mg/kg
Nonabromodiphenyl ether	N.D.	5 mg/kg
Decabromodiphenyl ether	N.D.	5 mg/kg

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**Test Result(s)**

Tested Item(s)	Result	MDL
<b>Phthalates (DBP, BBP, DEHP, DIBP)</b>		
Dibutyl phthalate (DBP) CAS#:84-74-2	N.D.	50 mg/kg
Butyl benzyl phthalate (BBP) CAS#:85-68-7	N.D.	50 mg/kg
Di-(2-ethylhexyl) phthalate (DEHP) CAS#:117-81-7	N.D.	50 mg/kg
Diisobutyl phthalate (DIBP) CAS#:84-69-5	N.D.	50 mg/kg

**Sample/Part Description** Mixed test, SMD LED, red body and transparent body

**Remark:**

- The sample(s) had been dissolved totally tested for Lead, Cadmium, Mercury.
- As specified by client, the test was conducted by mixing several samples together. The result(s) shown on this report may be different from the content of any homogeneous material.
- MDL = Method Detection Limit
- N.D. = Not Detected (<MDL )
- mg/kg = ppm = parts per million

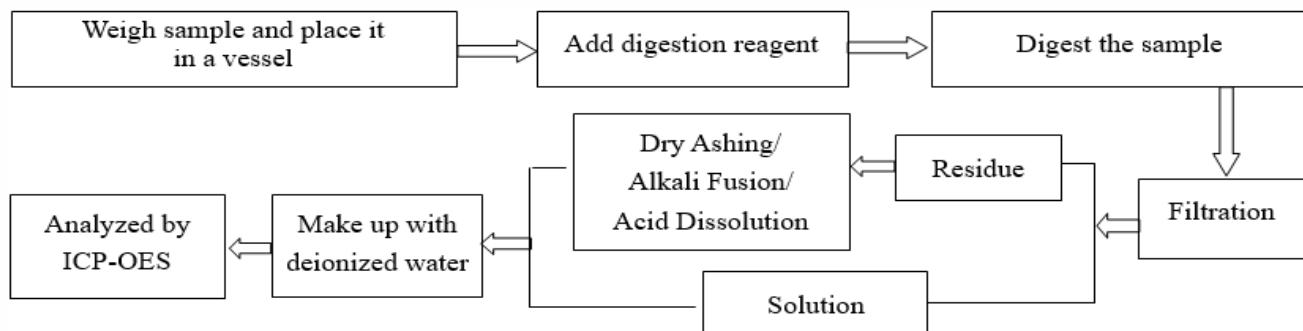
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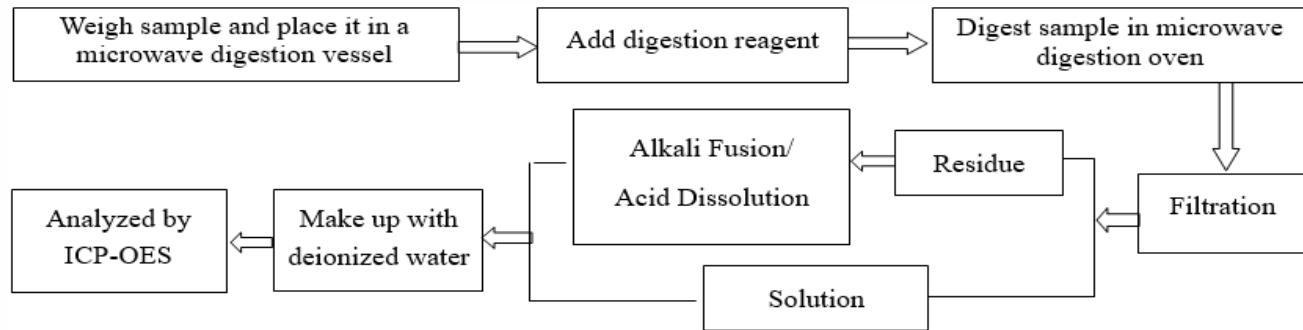
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## Test Process

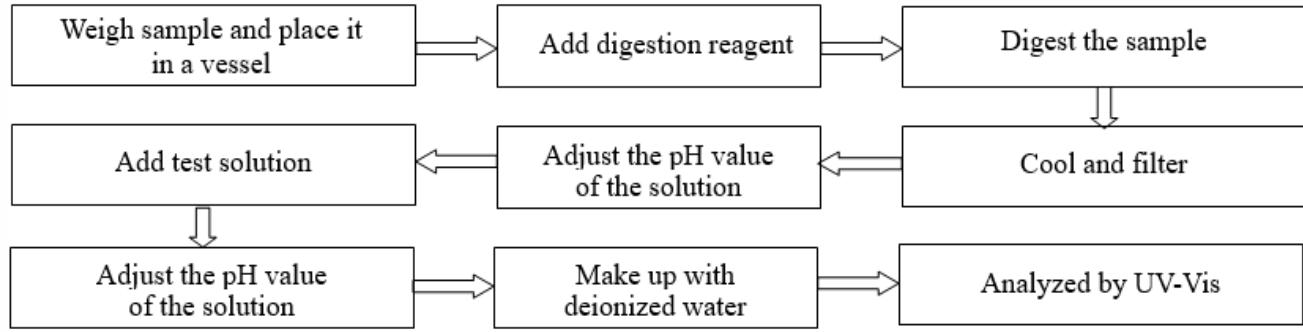
### 1. Lead (Pb), Cadmium (Cd), Chromium (Cr)



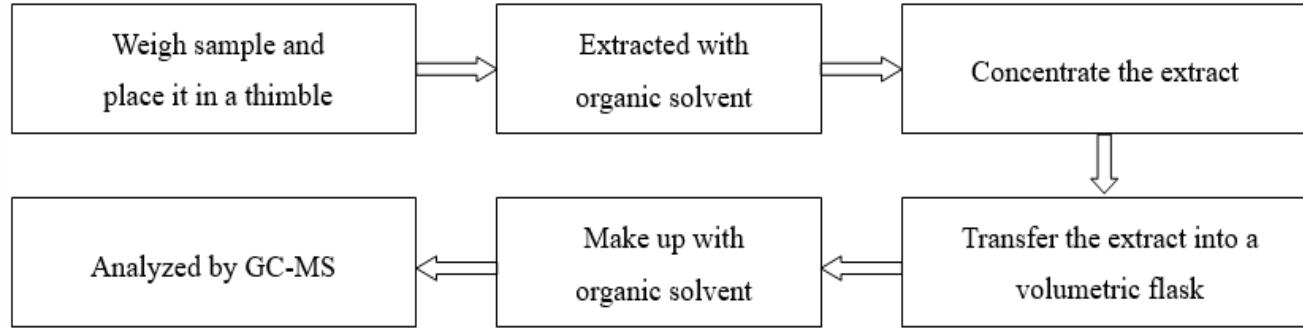
### 2. Mercury (Hg)



### 3. Hexavalent Chromium (Cr(VI))



### 4. Polybrominated Biphenyls (PBBs), Polybrominated Diphenyl Ethers (PBDEs)

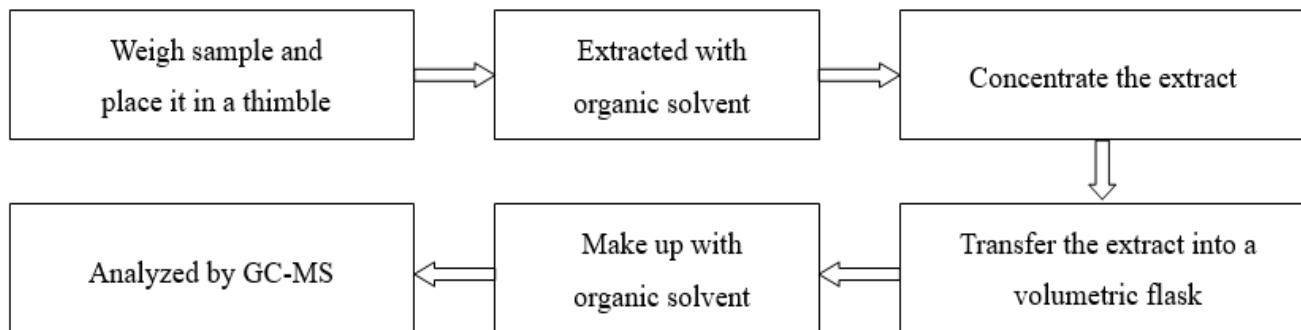


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## 5. Phthalates (DBP, BBP, DEHP, DIBP)

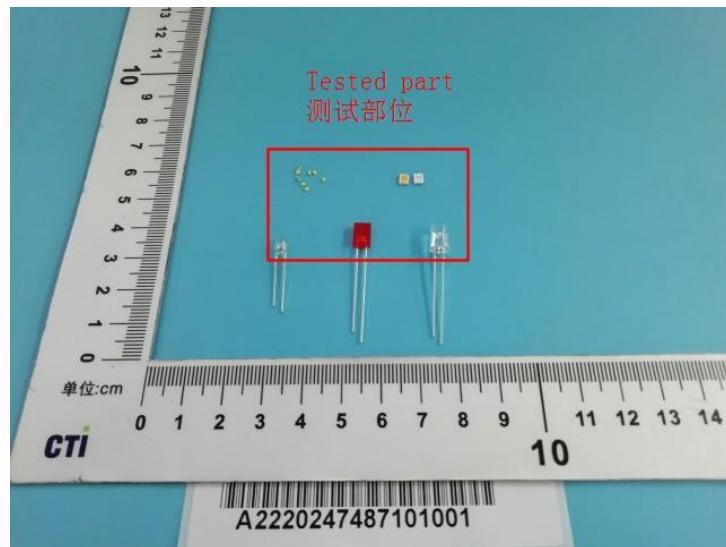


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## Photo(s) of the sample(s)



### Statement:

1. This report is considered invalid without approved signature, special seal and the seal on the perforation;
2. The Company Name shown on Report and Address, the sample(s) and sample information was/were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified;
3. The result(s) shown in this report refer(s) only to the sample(s) tested;
4. Without written approval of CTI, this report can't be reproduced except in full;
5. In case of any discrepancy between the English version and Chinese version of the testing reports (if generated), the Chinese version shall prevail.

\*\*\* End of report \*\*\*