



Test Report No.: DGC13042628VE Date: May 03, 2024 Page 1 of 4

Applicant: GuangDong Queendom Electronics Co.,Ltd

Address: Fuming Road, The 3rd Industrial Area of Dicong Gaobu Town Dongguan city, Guangdong

Province.China

Manufacturer: GuangDong Queendom Electronics Co.,Ltd

Address: Fuming Road, The 3rd Industrial Area of Dicong Gaobu Town Dongguan city, Guangdong

Province.China

Sample Name: LED Light Emitting Diode

Model No.: /

**Test period:** April 26, 2023 to May 03, 2024

Test requested: In accordance with RoHS Directive 2011/65/EU.

**Test method:** With reference to IEC 62321-2008 Procedures for the Determination of Levels of

Regulated Substances in Electrotechnical Products.

Test Items	Pretreatment Method	Measuring Instrument	MDL
Lead (Pb)	IEC 62321: Section 8	ICP-OES	2mg/kg
Cadmium (Cd)	IEC 62321: Section 8	ICP-OES	2mg/kg
Mercury (Hg)	IEC 62321: Section 7	ICP-OES	2mg/kg
Chromium (Cr <sup>6+</sup> )	IEC 62321: Annex C	UV-Vis	2mg/kg
PBBs/PBDEs	IEC 62321: Annex A	GC-MS	5mg/kg

Test result: Please refer to next page.

Written by:

Checked by:

Approved by:

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# Test results(Unit: mg/kg):

To ad Maria	Results	DallO Limit	
Test Items	No.1	RoHS Limit	
Cadmium (Cd)	N.D.	100	
Lead (Pb)	N.D.	1000	
Mercury (Hg)	N.D.	1000	
Chromium (Cr <sup>6+</sup> ) by Alkaline extraction	N.D.	1000	
Sum of PBBs	N.D.	1000	
Monobromobiphenyl	N.D.		
Dibromobiphenyl	N.D.		
Tribromobiphenyl	N.D.		
Tetrabromobiphenyl	N.D.		
Pentabromobiphenyl	N.D.		
Hexabromobiphenyl	N.D.		
Heptabromobiphenyl	N.D.		
Octabromobiphenyl	N.D.		
Nonabromobiphenyl	N.D.		
Decabromobiphenyl	N.D.		
Sum of PBDEs	N.D.	1000	
Monobromobiphenyl ether	N.D.		
Dibromobiphenyl ether	N.D.		
Tribromobiphenyl ether	N.D.		
Tetrabromobiphenyl ether	N.D.		
Pentabromobiphenyl ether	N.D.		
Hexabromobiphenyl ether	N.D.		
Heptabromobiphenyl ether	N.D.		
Octabromobiphenyl ether	N.D.		
Nonabromobiphenyl ether	N.D.		
Decabromobiphenyl ether	N.D.		

**Test Part Description:** 

No.1: Light Emitting Diode (mixture test)

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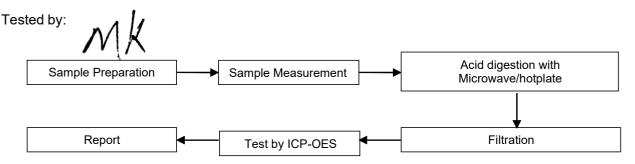
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#### Note:

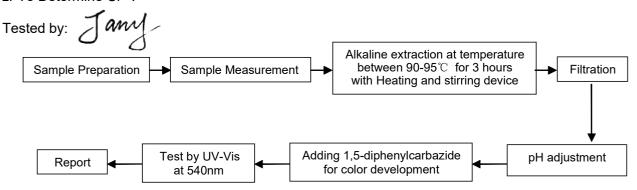
- (1) mg/kg=ppm=0.0001%;
- (2) N.D.=Not Detected(<MDL);
- (3) MDL=Method Detection Limit;
- (4) "---"=Not Conducted;
- (5) Specimens, which requested to determine Cadmium, Mercury and Lead Content, have been dissolved completely.

#### **Operation Flow Chart:**

1. To Determine Lead, Cadmium, Mercury:



2. To Determine Cr6+:



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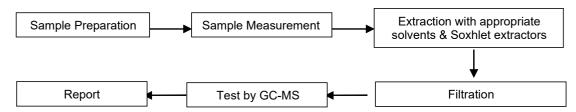




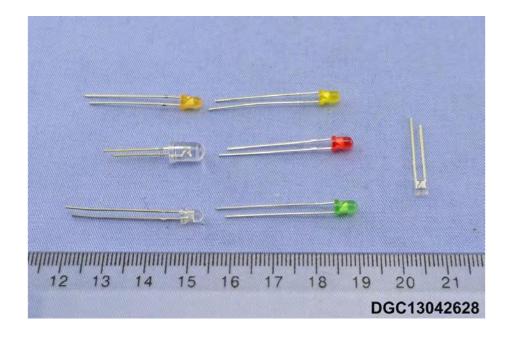
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## 3. To Determine PBBs/PBDEs:

Tested by:



## **Photograph of Sample:**



\*\*\*End of Report\*\*\*

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