

Test Report

No. CANEC1907722415

Date: 09 May 2019

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LUCKY LIGHT ELECTRONICS CO.,LTD.

No.19 2ND ROAD,QIUFULU COMMUNITY,DALANG TOWN,DONGGUAN CITY,GUANGDONG PROVINCE,CHINA

The following sample(s) was/were submitted and identified on behalf of the clients as : DISPLAY LED

SGS Job No. : CP19-021876 - SZ
 Date of Sample Received : 30 Apr 2019
 Testing Period : 30 Apr 2019 - 09 May 2019
 Test Requested : Selected test(s) as requested by client.
 Test Method : Please refer to next page(s).
 Test Results : Please refer to next page(s).

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

Zmguan

Zm guan
 Approved Signatory



SGS-CSTC Standards Technical Services Co., Ltd.
 Guangzhou Branch Testing Center Chemical Laboratory.

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Test Results :

Test Part Description :

Specimen No.	SGS Sample ID	Description
SN1	CAN19-077224.009	Silvery metal pin(semi-product)
SN2	CAN19-077224.010	White plastic w/ black coating(mixed)(semi-product)
SN3	CAN19-077224.011	Colorless transparent material(semi-product)
SN4	CAN19-077224.012	Black "PCB"(semi-product)

Remarks :

- (1) 1 mg/kg = 1 ppm = 0.0001%
- (2) MDL = Method Detection Limit
- (3) ND = Not Detected (< MDL)
- (4) "-" = Not Regulated

Elementary Analysis, Flame Retardants & Phthalates

Test Method : With reference to IEC 62321-4:2013+A1:2017, IEC 62321-5:2013, IEC 62321-7-2:2017 , IEC 62321-6:2015 and IEC 62321-8:2017, analyzed by ICP-OES , UV-Vis and GC-MS .

Test Item(s)	Unit	MDL	010	011	012
Cadmium (Cd)	mg/kg	2	ND	ND	ND
Lead (Pb)	mg/kg	2	ND	ND	ND
Mercury (Hg)	mg/kg	2	ND	ND	ND
Hexavalent Chromium (CrVI)	mg/kg	8	ND	ND	ND
Sum of PBBs	mg/kg	-	ND	ND	ND
Monobromobiphenyl	mg/kg	5	ND	ND	ND
Dibromobiphenyl	mg/kg	5	ND	ND	ND
Tribromobiphenyl	mg/kg	5	ND	ND	ND
Tetrabromobiphenyl	mg/kg	5	ND	ND	ND
Pentabromobiphenyl	mg/kg	5	ND	ND	ND
Hexabromobiphenyl	mg/kg	5	ND	ND	ND
Heptabromobiphenyl	mg/kg	5	ND	ND	ND
Octabromobiphenyl	mg/kg	5	ND	ND	ND
Nonabromobiphenyl	mg/kg	5	ND	ND	ND
Decabromobiphenyl	mg/kg	5	ND	ND	ND
Sum of PBDEs	mg/kg	-	ND	ND	ND
Monobromodiphenyl ether	mg/kg	5	ND	ND	ND



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Test Item(s)	Unit	MDL	010	011	012
Dibromodiphenyl ether	mg/kg	5	ND	ND	ND
Tribromodiphenyl ether	mg/kg	5	ND	ND	ND
Tetrabromodiphenyl ether	mg/kg	5	ND	ND	ND
Pentabromodiphenyl ether	mg/kg	5	ND	ND	ND
Hexabromodiphenyl ether	mg/kg	5	ND	ND	ND
Heptabromodiphenyl ether	mg/kg	5	ND	ND	ND
Octabromodiphenyl ether	mg/kg	5	ND	ND	ND
Nonabromodiphenyl ether	mg/kg	5	ND	ND	ND
Decabromodiphenyl ether	mg/kg	5	ND	ND	ND
Dibutyl phthalate (DBP)	mg/kg	50	ND	ND	ND
Butyl benzyl phthalate (BBP)	mg/kg	50	ND	ND	ND
Bis (2-ethylhexyl) phthalate (DEHP)	mg/kg	50	ND	ND	ND
Diisobutyl Phthalates (DIBP)	mg/kg	50	ND	ND	ND

Notes :

(1) IEC 62321 series is equivalent to EN 62321 series

http://www.cenelec.eu/dyn/www/f?p=104:30:1742232870351101:::FSP_ORG_ID,FSP_LANG_ID:1258637,25

Elementary Analysis

Test Method : With reference to IEC 62321-4:2013+A1:2017, IEC 62321-5:2013, IEC 62321-7-1:2015, analyzed by ICP-OES and UV-Vis .

Test Item(s)	Unit	MDL	009
Cadmium (Cd)	mg/kg	2	ND
Lead (Pb)	mg/kg	2	ND
Mercury (Hg)	mg/kg	2	ND
Hexavalent Chromium (Cr(VI))▼	µg/cm ²	0.10	ND

Notes :

(1) IEC 62321 series is equivalent to EN 62321 series

http://www.cenelec.eu/dyn/www/f?p=104:30:1742232870351101:::FSP_ORG_ID,FSP_LANG_ID:1258637,25

- (2) ▼ = a. The sample is positive for CrVI if the CrVI concentration is greater than 0.13 µg/cm². The sample coating is considered to contain CrVI
b. The sample is negative for CrVI if CrVI is ND (concentration less than 0.10 µg/cm²). The coating is considered a non-CrVI based coating
c. The result between 0.10 µg/cm² and 0.13 µg/cm² is considered to be inconclusive - unavoidable coating variations may influence the determination



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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.

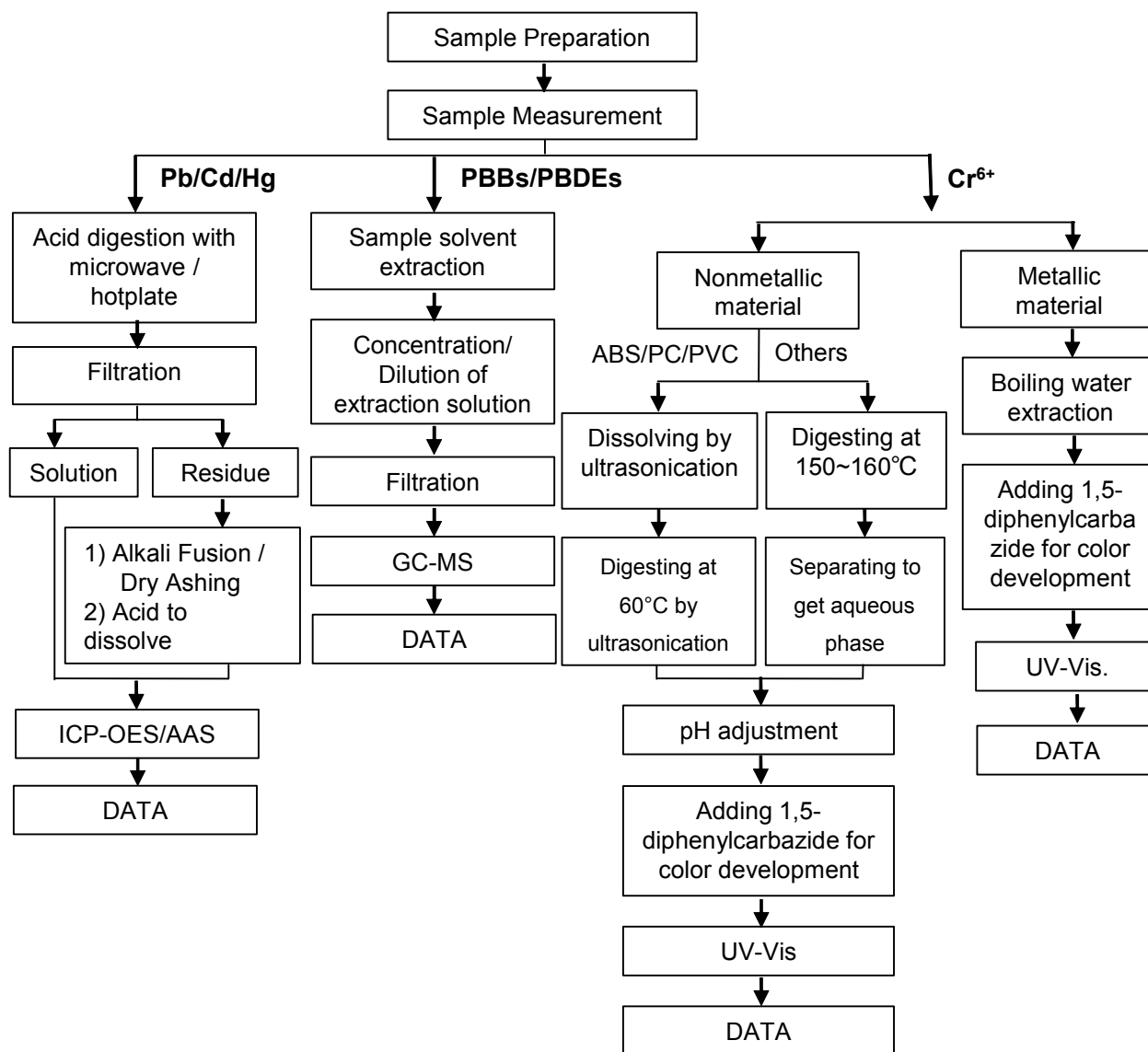
Remark: The sample(s) 010 was/were analyzed on behalf of the applicant as mixing sample in one testing. The above result(s) was/were only given as the informality value and only for reference.



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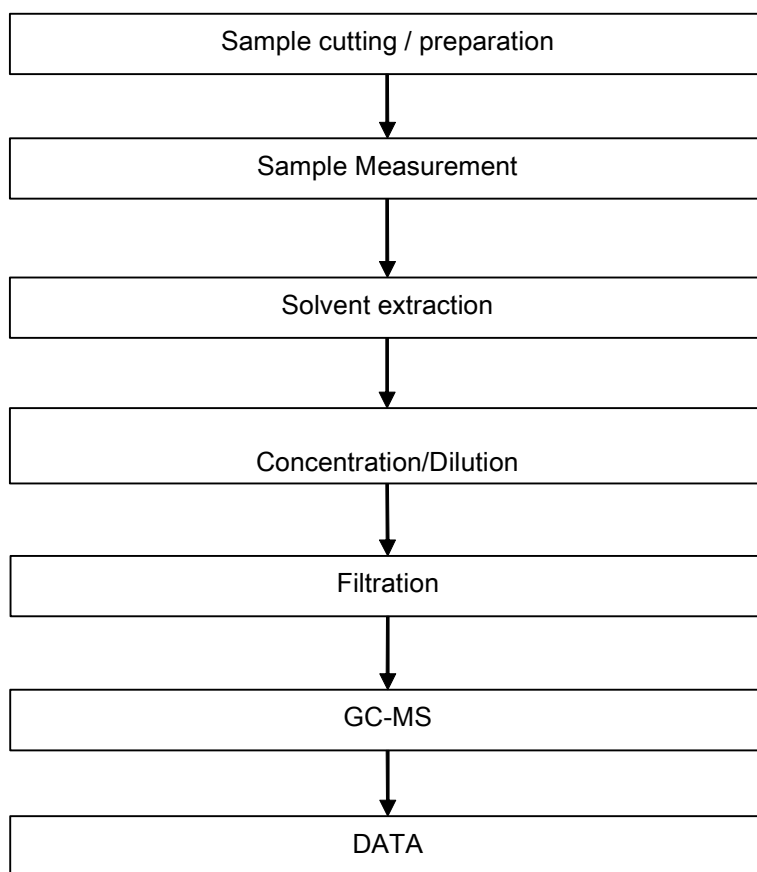
Pb/Cd/Hg/Cr⁶⁺/PBBs/PBDEs Testing Flow Chart

- 1) These samples were dissolved totally by pre-conditioning method according to below flow chart.
(Cr⁶⁺ and PBBs/PBDEs test method excluded).



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Phthalates Testing Flow Chart



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Sample photo:



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*** End of Report ***

