

(No.): ETR23600251

(Date): 15-Jun-2023

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(EVERLIGHT ELECTRONICS CO., LTD.)

(NO. 6-8, ZHONGHUARD., SHULIN DIST., NEW TAIPEI CITY 23860, TAIWAN)

(The following sample(s) was/were submitted and identified by the applicant

as)

/	
BASIC INFORMATION	
Type of Product	HIGH POWER LED_CH2016-X
Supplier Company Name	EVERLIGHT
Address	NO.6-8, ZHONGHUA RD., SHULIN DIST., NEW TAIPEI CITY 23860, TAIWAN
Tel / Fax / Email	TEL:886-2685-6688
	FAX:886-2685-6699
	E-MAIL: allenchiang@everlight.com
Contact Person	Allen
EVERLIGHT REPORT NO	EVERLIGHT-CH2016-X SERIES
	Sampling Product: CH2016E-C07001L-53A64DJ6K23037-2T-AM-SGS-15-Jun-2023
PRODUCT INFORMATION	
Product/component Sample description	DRL(white) ,Tail lamp(red) ,Turning light(pc amber)
Quantity (numbers or weight)	0.0094 g
EVERLIGHT P/N	CH2016-X SERIES
	Sampling Product: CH2016E-C07001L-53A64DJ6K23037-2T-AM
Product Lot No	T230317A0702GP15W6L
Country of Origin	TAIWAN
TEST INFORMATION	•
Sample preparation	CUTTING
Test Method	RoHS: IEC 62321, Halogen: BS EN 14582
MDL	Cd, Pb, Hg: 2 mg/kg, PBBs/PBDEs: 5 mg/kg, Halogen: 50 mg/kg
(0 1 0 1 1 1 1 5 )	(EVERY LOUIT EVERY DAVID OF OUR LEED)

(Sample Submitted By) (EVERLIGHT ELECTRONICS CO., LTD.)

\_\_\_\_\_\_ : 02-Jun-2023

(Testing Period) : 02-Jun-2023 to 15-Jun-2023

(Test Results) (Please refer to following pages).



(Sample Receiving Date)





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(Test Requested)

RoHS 2011/65/EU Annex II

(EU) 2015/863

, DBP, BBP, DEHP, DIBP

specified by client, with reference to RoHS 2011/65/EU Annex II and amending Directive (EU) 2015/863 to determine Cadmium, Lead, Mercury, Cr(VI), PBBs, PBDEs, DBP, BBP, DEHP, DIBP contents in the submitted

sample(s).)

PAHs (2)

(As specified by client, to test PAHs

and other item(s).)

(Conclusion)

(1)

(1)

DBP. (EU)

BBP, DEHP, DIBP

RoHS 2011/65/EU Annex II

2015/863

(Based on the performed tests on submitted sample(s), the test results of Cadmium, Lead, Mercury, Cr(VI), PBBs, PBDEs,

DBP, BBP, DEHP, DIBP comply with the limits as set by RoHS Directive (EU)

2015/863 amending Annex II to Directive 2011/65/EU.)

(2)

PAHs 3

(Based upon the performed tests on

the submitted sample(s), the test results of PAHs (15 items) comply with the limits of PAHs requirement (Category 3) Other consumer products as set

by German Committee on Product Safety (AfPS) GS PAHs.)

(Test Part Description)

No.1

HIGH POWER LED\_CH2016-X

(Test Results)

(Test Items)	(Method)	(Unit)	MDL	(Result) No.1	(Limit)
(Cd) (Cadmium (Cd))	IEC 62321-5: 2013	mg/kg	2	n.d.	100
(Pb) (Lead (Pb))	(With reference to IEC 62321-5: 2013, analysis was performed by ICP-OES.)	mg/kg	2	n.d.	1000



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(Test Items)	(Method)	(Unit)	MDL	(Result)	(Limit)
(Hg) (Mercury (Hg))	IEC 62321-4: 2013+ AMD1: 2017 (With reference to IEC 62321-4: 2013+ AMD1: 2017, analysis was performed by ICP-OES.)	mg/kg	2	n.d.	1000
Cr(VI) (Hexavalent Chromium Cr(VI))	IEC 62321-7-2: 2017 - (With reference to IEC 62321-7-2: 2017, analysis was performed by UV-VIS.)	mg/kg	8	n.d.	1000
(Monobromobiphenyl)		mg/kg	5	n.d.	-
(Dibromobiphenyl)		mg/kg	5	n.d.	-
(Tribromobiphenyl)		mg/kg	5	n.d.	-
(Tetrabromobiphenyl)		mg/kg	5	n.d.	-
(Pentabromobiphenyl)		mg/kg	5	n.d.	-
(Hexabromobiphenyl)		mg/kg	5	n.d.	-
(Heptabromobiphenyl)		mg/kg	5	n.d.	-
(Octabromobiphenyl)	n n	mg/kg	5	n.d.	-
(Nonabromobiphenyl)		mg/kg	5	n.d.	-
(Decabromobiphenyl)		mg/kg	5	n.d.	-
(Sum of PBBs)	IEC 62321-6: 2015 / (With reference to IEC 62321-6:	mg/kg	-	n.d.	1000
(Monobromodiphenyl ether)	2015, analysis was performed by GC/MS.)	mg/kg	5	n.d.	-
(Dibromodiphenyl ether)	2019, analysis was performed by Ge/Wis.)	mg/kg	5	n.d.	-
(Tribromodiphenyl ether)		mg/kg	5	n.d.	-
(Tetrabromodiphenyl ether)		mg/kg	5	n.d.	-
(Pentabromodiphenyl ether)		mg/kg	5	n.d.	-
(Hexabromodiphenyl ether)	7	mg/kg	5	n.d.	-
(Heptabromodiphenyl ether)	·	mg/kg	5	n.d.	-
(Octabromodiphenyl ether)		mg/kg	5	n.d.	-
(Nonabromodiphenyl ether)	7	mg/kg	5	n.d.	-
(Decabromodiphenyl ether)		mg/kg	5	n.d.	-
(Sum of PBDEs)		mg/kg	-	n.d.	1000



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(Test Items)	(Method)		(Unit)	MDL	(Result)	(Limit)
(BBP) (Butyl benzyl	IEC 62321-8: 2017	/	mg/kg	50	No.1 n.d.	1000
phthalate (BBP))	(With reference to IEC 62321 2017, analysis was performed by GC/	/MS.)				
(DBP) (Dibutyl phthalate (DBP))	IEC 62321-8: 2017 (With reference to IEC 62321 2017, analysis was performed by GC/		mg/kg	50	n.d.	1000
(2- ) (DEHP) (Di-(2- ohthalate (DEHP))	IEC 62321-8: 2017 (With reference to IEC 62321	/ 1 - 8:	mg/kg	50	n.d.	1000
(DIBP) (Diisobutyl DIBP))	2017, analysis was performed by GC/ IEC 62321-8: 2017 (With reference to IEC 62321	/ 1-8:	mg/kg	50	n.d.	1000
(DIDP) (Diisodecyl DIDP)) (CAS No.: 26761-40-0,	2017, analysis was performed by GC/ IEC 62321-8: 2017 (With reference to IEC 62321	/ 1-8:	mg/kg	50	n.d.	-
) (DINP) (Diisononyl DINP)) (CAS No.: 28553-12-0,	2017, analysis was performed by GC/ IEC 62321-8: 2017 (With reference to IEC 62321 2017, analysis was performed by GC/	/ 1-8:	mg/kg	50	n.d.	-
(DNOP) (Di-n-octyl DNOP)) (CAS No.: 117-84-0)	IEC 62321-8: 2017  (With reference to IEC 62321 2017, analysis was performed by GC/	/ 1-8:	mg/kg	50	n.d.	-
(DNPP) (Di-n-pentyl DNPP)) (CAS No.: 131-18-0)	IEC 62321-8: 2017 (With reference to IEC 62321	/ 1-8:	mg/kg	50	n.d.	-
(DNHP) (Di-n-hexyl DNHP)) (CAS No.: 84-75-3)	2017, analysis was performed by GC/ IEC 62321-8: 2017 (With reference to IEC 62321	/ 1-8:	mg/kg	50	n.d.	-
(2- ) (DMEP) (Bis(2- nyl) phthalate (DMEP)) (CAS No.:	(With reference to IEC 62321	/ 1-8:	mg/kg	50	n.d.	-
(DMP) (Dimethyl DMP)) (CAS No.: 131-11-3)	2017, analysis was performed by GC/ IEC 62321-8: 2017 (With reference to IEC 62321 2017, analysis was performed by GC/	/ 1 - 8:	mg/kg	50	n.d.	-



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(Method)		(Unit)	MDL	NI- 1	(Limit)
IEC 62321-8: 2017 (With reference to IEC 62 2017, analysis was performed by		mg/kg	50	No.1 n.d.	-
IEC 62321-8: 2017  (With reference to IEC 62 2017, analysis was performed by	/ 2321-8:	mg/kg	50	n.d.	-
IEC 62321: 2008 (With reference to IEC 6232 analysis was performed by GC/M	/ 21: 2008,	mg/kg	5	n.d.	-
		mg/kg	50	98.1	-
		mg/kg	50	n.d.	-
		mg/kg	50	n.d.	-

mg/kg

50

n.d.

CEN /TS 15968: 2010 (With reference to CEN /TS 15968: 2010, analysis was performed by LC/MS/MS.)



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(Test Items)	(Method)	(Unit)	MDL	(Result)	(Limit)
(Polycyclic Aromatic Hydrocarbons) (PAHs)				140.1	
(a) (Benzo[a]pyrene) (CAS No.: 50-32-8)		mg/kg	0.2	n.d.	
(e) (Benzo[e]pyrene) (CAS No.: 192-97- 2)		mg/kg	0.2	n.d.	
(Benzo[a]anthracene) (CAS No.: 56-55-3)		mg/kg	0.2	n.d.	
(b) (Benzo[b]fluoranthene) (CAS No.: 205-99-2)		mg/kg	0.2	n.d.	
(j) (Benzo[j]fluoranthene) (CAS No.: 205-82-3)		mg/kg	0.2	n.d.	
(k) (Benzo[k]fluoranthene) (CAS No.: 207-08-9)	A fPS GS 2019:01 PAK /	mg/kg	0.2	n.d.	
(Chrysene) (CAS No.: 218-01-9)	(With reference to AfPS GS	mg/kg	0.2	n.d.	
(Dibenzo[a,h]anthracene) (CAS No.: 53-70-3)	2019:01 PAK, analysis was performed by GC/MS.)	mg/kg	0.2	n.d.	
(Benzo[g,h,i]perylene) (CAS No.: 191- 24-2)		mg/kg	0.2	n.d.	
(Indeno[1,2,3-c,d]pyrene) (CAS No.: 193-39-5)		mg/kg	0.2	n.d.	
(Anthracene) (CAS No.: 120-12-7)		mg/kg	0.2	n.d.	
(Fluoranthene) (CAS No.: 206-44-0)		mg/kg	0.2	n.d.	
(Phenanthrene) (CAS No.: 85-01-8)		mg/kg	0.2	n.d.	
(Pyrene) (CAS No.: 129-00-0)		mg/kg	0.2	n.d.	
(Naphthalene) (CAS No.: 91-20-3)		mg/kg	0.2	n.d.	
15 (Sum of 15 PAHs)		mg/kg	-	n.d.	



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(Note)
1. mg/kg = ppm 0.1wt\% = 0.1\% = 1000ppm
2. MDL = Method Detection Limit (
3. n.d. = Not Detected (
                            );
                                   MDL/Less than MDL
4. "-" = Not Regulated (
                                  (PFOS and its salts including):
  CAS No.: 1763-23-1, 2795-39-3, 29457-72-5, 29081-56-9, 70225-14-8, 56773-42-3, 251099-16-8, 307-35-7,
  91036-71-4, 4021-47-0 and others.
                              (PFOA and its salts including):
  CAS No.: 335-67-1, 335-95-5, 2395-00-8, 335-93-3, 335-66-0, 3825-26-1 and others.
7.
                     ILA C-G 8:09/2019
                             (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. According to this rule, the
  judgement of conformity is based on the comparing test results with limits.)
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Remark

(AfPS): GSPAHs

AfPS (German commission for Product Safety): GS PAHs requirements

1 (Category 1) (Category 2) 3 (Category 3) 30 ) 30 ( 2009/48/EC (Materials that (Materials are not in Category 1, with intended to be placed in the intended or foreseeable long mouth, or materials in toys (Parameter) (Directive 2009/48/EC) or articles for children up to 3 years of age with intended long-term skin contact (> 30 seconds))



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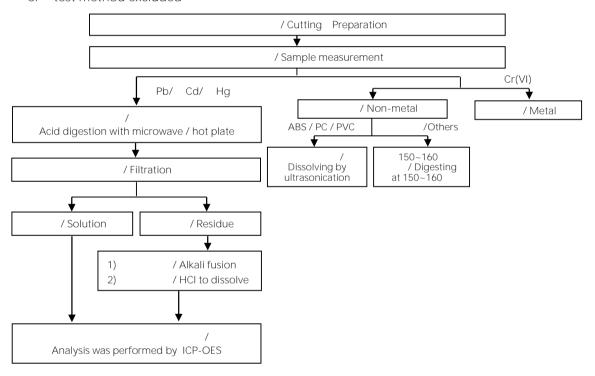
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/ Analytical flow chart of heavy metal

These samples were dissolved totally by pre-conditioning method according to below flow chart.  $Cr^{6+}$  test method excluded





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/ Analytical flow chart - PBBs/PBDEs

/ First testing process
/ Optional screen process
/ Confirmation process

/ Sample pretreatment

/ Screen analysis

/ Sample extraction
/ Soxhlet method

/
Concentrate/Dilute extracted solution

/ Filter

/ GC/MS



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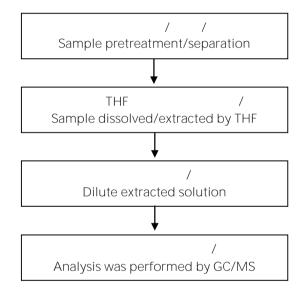
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/ Analytical flow chart - Phthalate

/Test method: IEC 62321-8





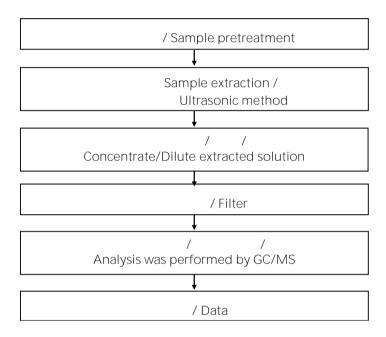
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#### / Analytical flow chart - HBCDD





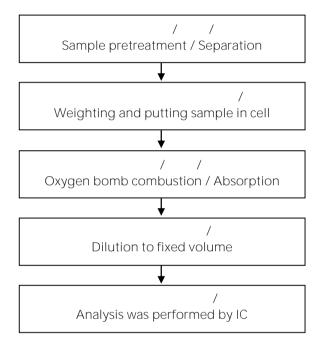
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/ Analytical flow chart - Halogen





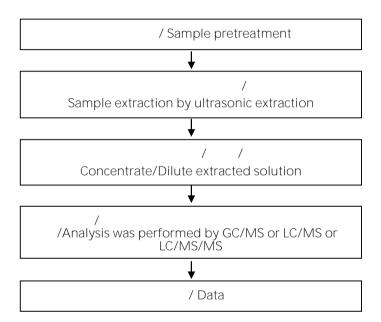
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( / / / ) / Analytical flow chart - PFAS (including PFOA/PFOS/its related compound, etc.)





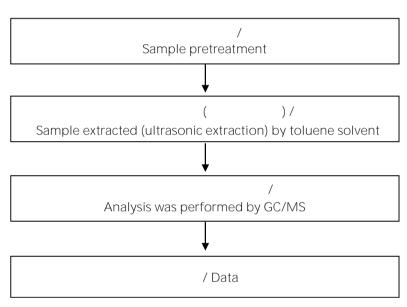
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Analytical flow chart - PAHs (Polycyclic Aromatic Hydrocarbons)







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