

(No.): ETR23600251

(Date): 15-Jun-2023

(Page): 1 of 17

(EVERLIGHT ELECTRONICS CO., LTD.)

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

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
(C I - C - I !++ I D)	(FVEDLIGHT FLECTRONICS OF LTD.)

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

_____ (Sample Receiving Date) : 02-Jun-2023

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

(Please refer to following pages).





PIN CODF: 12B675F4



(No.): ETR23600251

(Date): 15-Jun-2023

(Page): 2 of 17

(EVERLIGHT ELECTRONICS CO., LTD.)
8 (NO. 6-8, ZHONGHUA RD., SHULIN DIST., NEW TAIPEI CITY 23860, TAIWAN)

- : (1) RoHS 2011/65/EU Annex II (EU) 2015/863 , DBP, BBP, DEHP, DIBP (As 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).)
 - (2) PAHs (As specified by client, to test PAHs and other item(s).)
- : (1) , DBP, BBP, DEHP, DIBP RoHS 2011/65/EU Annex II (EU) 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) (A fPS) GS
 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) O ther consumer products as set by German Committee on Product Safety (AfPS) GS PAHs.)

No.1 : HIGH POWER LED_CH2016-X

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



(No.): ETR23600251

(Date): 15-Jun-2023

(Page): 3 of 17

(EVERLIGHT ELECTRONICS CO., LTD.)

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

(Test Items)	(Method)	(Unit)	MDL	(Result)	(Limit)
(Hg) (Mercury (Hg))	IEC 62321-4: 2013+ AMD 1: 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)		mg/kg	5	n.d.	-
(Nonabromobiphenyl)		mg/kg	5	n.d.	-
(Decabromobiphenyl)		mg/kg	5	n.d.	-
	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)	2015, analysis was performed by Gorivis.,	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)	Ī	mg/kg	5	n.d.	-
(Heptabromodiphenyl ether)		mg/kg	5	n.d.	-
(Octabromodiphenyl ether)		mg/kg	5	n.d.	-
(Nonabromodiphenyl ether)		mg/kg	5	n.d.	-
(Decabromodiphenyl ether)	T	mg/kg	5	n.d.	-
		mg/kg	-	n.d.	1000



(No.): ETR23600251

(Date): 15-Jun-2023

(Page): 4 of 17

(EVERLIGHT ELECTRONICS CO., LTD.)

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

			MDL		
(Test Items)	(Method)	(Unit)		(Result)	(Limit)
				No.1	
(BBP) (Butyl benzyl	IEC 62321-8: 2017 /	mg/kg	50	n.d.	1000
phthalate (BBP))	(With reference to IEC 62321-8:				
(0.00) (0.11 1.11 1.11	2017, analysis was performed by GC/MS.)	/1	F.0		1000
(DBP) (Dibutyl phthalate (DBP))	IEC 62321-8: 2017 / (With reference to IEC 62321-8:	mg/kg	50	n.d.	1000
	2017, analysis was performed by GC/MS.)				
(2-) (DEHP) (Di-(2-	IEC 62321-8: 2017 /	mg/kg	50	n.d.	1000
ethylhexyl) phthalate (DEHP))	(With reference to IEC 62321-8:	ilig/kg	30	H.G.	1000
	2017, analysis was performed by GC/MS.)				
(DIBP) (Diisobutyl	IEC 62321-8: 2017 /	mg/kg	50	n.d.	1000
phthalate (DIBP))	(With reference to IEC 62321-8:	19,9		11101	. 000
	2017, analysis was performed by GC/MS.)				
(DIDP) (Diisodecyl	IEC 62321-8: 2017 /	mg/kg	50	n.d.	_
phthalate (DIDP)) (CAS No.: 26761-40-0,	(With reference to IEC 62321-8:				
68515-49-1)	2017, analysis was performed by GC/MS.)				
(DINP) (Diisononyl	IEC 62321-8: 2017 /	mg/kg	50	n.d.	-
phthalate (DINP)) (CAS No.: 28553-12-0,	(With reference to IEC 62321-8:				
68515-48-0)	2017, analysis was performed by GC/MS.)				
(DNOP) (Di-n-octyl	IEC 62321-8: 2017 /	mg/kg	50	n.d.	-
phthalate (DNOP)) (CAS No.: 117-84-0)	(With reference to IEC 62321-8:				
(5.1.5.5) (5.1.5.5)	2017, analysis was performed by GC/MS.)				
(DNPP) (Di-n-pentyl	IEC 62321-8: 2017 /	mg/kg	50	n.d.	-
phthalate (DNPP)) (CAS No.: 131-18-0)	(With reference to IEC 62321-8:				
(DNIID) (Din boyy)	2017, analysis was performed by GC/MS.) IEC 62321-8: 2017 /	no a /l a	ГО	n d	
(DNHP) (Di-n-hexyl phthalate (DNHP)) (CAS No.: 84-75-3)	(With reference to IEC 62321-8:	mg/kg	50	n.d.	-
	2017, analysis was performed by GC/MS.)				
(2-) (DMEP) (Bis(2-		mg/kg	50	n.d.	_
methoxyethyl) phthalate (DMEP)) (CAS No.:	(With reference to IEC 62321-8:	I Hig/ kg	30	n.a.	_
117-82-8)	2017, analysis was performed by GC/MS.)				
(DMP) (Dimethyl	IEC 62321-8: 2017 /	mg/kg	50	n.d.	-
phthalate (DMP)) (CAS No.: 131-11-3)	(With reference to IEC 62321-8:	J,			
,	2017, analysis was performed by GC/MS.)				
•	1	•			



(No.): ETR23600251

(Date): 15-Jun-2023

(Page): 5 of 17

(EVERLIGHT ELECTRONICS CO., LTD.)
6-8 (NO. 6-8, ZHONGHUA RD., SHULIN DIST., NEW TAIPEI CITY 23860, TAIWAN)

		MDL		
(Method)	(Unit)			(Limit)
JEQ (2004 Q 2017		= 0	No.1	
IEC 62321-8: 2017 / (With reference to IEC 62321-8: 2017, analysis was performed by GC/MS.)	mg/kg	50	n.d.	-
IEC 62321-8: 2017 / (With reference to IEC 62321-8: 2017, analysis was performed by GC/MS.)	mg/kg	50	n.d.	-
IEC 62321: 2008 / (With reference to IEC 62321: 2008, analysis was performed by GC/MS.)	mg/kg	5	n.d.	-
	mg/kg	50	98.1	-
	mg/kg	50	n.d.	-
	mg/kg	50	n.d.	-
CFN/TS 15968: 2010	mg/kg	50	n.d.	-
52.1, 10 10,00. 2010				

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



(No.): ETR23600251

(Date): 15-Jun-2023

(Page): 6 of 17

(EVERLIGHT ELECTRONICS CO., LTD.)
(NO. 6-8, ZHONGHUA RD., SHULIN DIST., NEW TAIPEI CITY 23860, TAIWAN)

7			MDL	(5 1)	
(Test Items)	(Method)	(Unit)		(Result)	(Limit)
				No.1	
Hydrocarbons) (PAHs)					
(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)	A fPS GS 2019:01 PAK / (With reference to A fPS GS	mg/kg	0.2	n.d.	
(j) (Benzo[j]fluoranthene) (CASNo.: 205-82-3)		mg/kg	0.2	n.d.	
(k) (Benzo[k]fluoranthene) (CAS No.: 207-08-9)		mg/kg	0.2	n.d.	
(Chrysene) (CAS No.: 218-01-9)		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.	
		mg/kg	-	n.d.	



(No.): ETR23600251

(Date): 15-Jun-2023

(Page): 7 of 17

(EVERLIGHT ELECTRONICS CO., LTD.)
6-8 (NO. 6-8, ZHONGHUA RD., SHULIN DIST., NEW TAIPEI CITY 23860, TAIWAN)

```
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.)
```



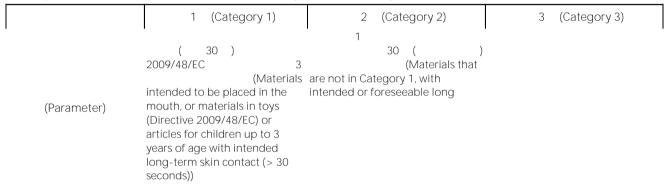
(No.): ETR23600251

(Date): 15-Jun-2023

(Page): 8 of 17

(EVERLIGHT ELECTRONICS CO., LTD.)
6-8 (NO. 6-8, ZHONGHUA RD., SHULIN DIST., NEW TAIPEI CITY 23860, TAIWAN)

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





(No.): ETR23600251

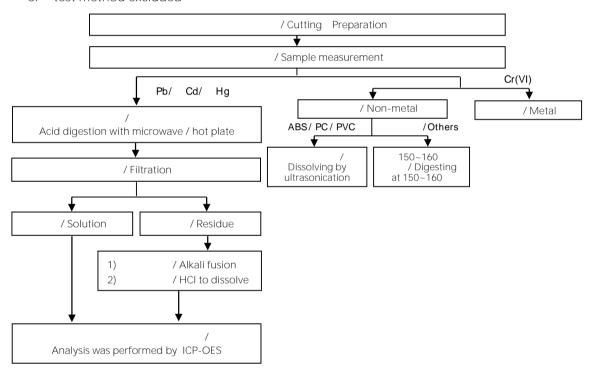
(Date): 15-Jun-2023

(Page): 9 of 17

(EVERLIGHT ELECTRONICS CO., LTD.)
6-8 (NO. 6-8, ZHONGHUA RD., SHULIN DIST., NEW TAIPEI CITY 23860, TAIWAN)

/ 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





(No.): ETR23600251

(Date): 15-Jun-2023

(Page): 10 of 17

(EVERLIGHT ELECTRONICS CO., LTD.) 0-8 (NO. 6-8, ZHONGHUA RD., SHULIN DIST., NEW TAIPEI CITY 23860, TAIWAN)

/ 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



(No.): ETR23600251

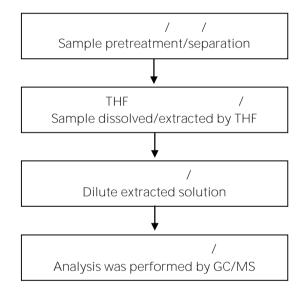
(Date): 15-Jun-2023

(Page): 11 of 17

(EVERLIGHT ELECTRONICS CO., LTD.)
6-8 (NO. 6-8, ZHONGHUA RD., SHULIN DIST., NEW TAIPEI CITY 23860, TAIWAN)

/ Analytical flow chart - Phthalate

/Test method: IEC 62321-8





(No.): ETR23600251

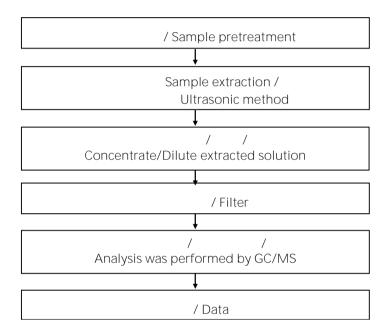
(Date): 15-Jun-2023

(Page): 12 of 17

(EVERLIGHT ELECTRONICS CO., LTD.)

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

/ Analytical flow chart - HBCDD





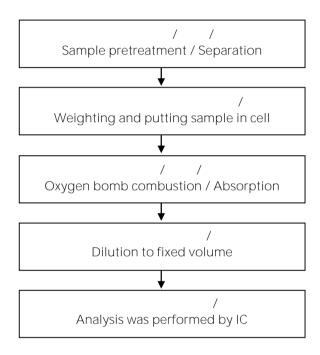
(No.): ETR23600251

(Date): 15-Jun-2023

(Page): 13 of 17

(EVERLIGHT ELECTRONICS CO., LTD.)
6-8 (NO. 6-8, ZHONGHUA RD., SHULIN DIST., NEW TAIPEI CITY 23860, TAIWAN)

/ Analytical flow chart - Halogen





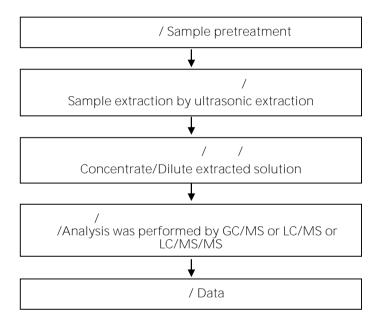
(No.): ETR23600251

(Date): 15-Jun-2023

(Page): 14 of 17

(EVERLIGHT ELECTRONICS CO., LTD.) 0-8 (NO. 6-8, ZHONGHUA RD., SHULIN DIST., NEW TAIPEI CITY 23860, TAIWAN)

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





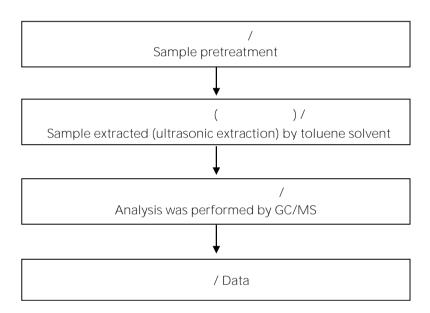
(No.): ETR23600251

(Date): 15-Jun-2023

(Page): 15 of 17

(EVERLIGHT ELECTRONICS CO., LTD.)
6-8 (NO. 6-8, ZHONGHUA RD., SHULIN DIST., NEW TAIPEI CITY 23860, TAIWAN)

Analytical flow chart - PAHs (Polycyclic Aromatic Hydrocarbons)







(Page): 17 of 17