

(No.): ETR23900394

(Date): 15-Sep-2023

(Page): 1 of 23

(EVERLIGHT ELECTRONICS CO., LTD.)

(NO. 6-8, ZHONGHUA RD., 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	PHOTO LINK PLR				
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-PHOTO LINK PLR SERIES				
	Sampling Product: PLR138/S17-SGS-15-Sep-2023				
PRODUCT INFORMATION	·				
Product/component Sample	CD PLAY				
description					
Quantity (numbers or weight)	0.1318 g				
EVERLIGHT P/N	PHOTO LINK PLR SERIES				
	Sampling Product : PLR138/S17				
Product Lot No	ZS23042418M-2				
Country of Origin	CHINA				
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				

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

(Sample Receiving Date) : 04-Sep-2023

(Testing Period) : 04-Sep-2023 to 15-Sep-2023

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







(No.): ETR23900394

(Date): 15-Sep-2023

(Page): 2 of 23

(EVERLIGHT ELECTRONICS CO., LTD.)

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

(Test Requested) (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).)

PAHs

(As specified by client, to test PAHs and

other item(s).)

(Conclusion)

(1)

RoHS 2011/65/FU Annex II

, DBP, BBP,

DEHP, DIBP (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)

(AfPS) GS PAHs

(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)

(BODY) No.1

(PLATING LAYER OF SILVER COLORED METAL PIN) No.2 (BASE MATERIAL OF SILVER COLORED METAL PIN) No.3

) (SILVER COLORED METAL PIN (INCLUDING THE PLATING LAYER)) No.4

(Test Results)

(Test Items)	(Method)	(Unit)	MDL (Result)		(Result)		(Limit)
, ,	,	, ,		No.1	No.2	No.3	
(Cd) (Cadmium (Cd))	IEC 62321-5: 2013 (With reference to IEC	mg/kg	2	n.d.			100
(Pb) (Lead (Pb))	62321-5: 2013, analysis was performed by ICP-OES.)	mg/kg	2	n.d.			1000



(No.): ETR23900394

(Date): 15-Sep-2023

(Page): 3 of 23

(EVERLIGHT ELECTRONICS CO., LTD.)

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

/T t t \			MDL		(Dag. 14)		(1.1
(Test Items)	(Method)) (Unit)		(Result) No.1 No.2 No.3		No.3	(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
(Cd) (Cadmium (Cd))	IEC 62321-5: 2013 (IEC 62321-5:	mg/kg	2		n.d.		100
(Pb) (Lead (Pb))	-2013 application of modified digestion by surface etching, analysis was performed by ICP-OES.)	mg/kg	2		59.5		1000
(Hg) (Mercury (Hg))	IEC 62321-4: 2013+ AMD1: 2017 (IEC 62321-4: 2013+ AMD1: 2017 application of modified digestion by surface etching, analysis was performed by ICP-OES.)	mg/kg	2		n.d.		1000
(Cd) (Cadmium (Cd))	IEC 62321-5: 2013 (With reference to IEC	mg/kg	2			n.d.	100
(Pb) (Lead (Pb))	62321-5: 2013, analysis was performed by ICP-OES.)	mg/kg	2			11.0	1000
(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



(No.): ETR23900394

(Date): 15-Sep-2023

(Page): 4 of 23

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

/T h h \	(2.4.111)	(11.11)	MDL		(Daa. 14)		(1.1)
(Test Items)	(Method)	(Unit)			(Result)		(Limit)
(Have valent Character)	JEC (2001 7 1 2015	/ 2	0.1	No.1	No.2	No.3	
(Hexavalent Chromium)	IEC 62321-7-1: 2015 - (With reference to IEC	μg/cm²	0.1		n.d.	n.d.	-
Cr(VI) (#2)	62321-7-1: 2015, analysis was performed						
	by UV-VIS.)						
(Monobromobiphenyl)		mg/kg	5	n.d.			-
(Dibromobiphenyl)	7	mg/kg	5	n.d.			-
(Tribromobiphenyl)	1	mg/kg	5	n.d.			-
(Tetrabromobiphenyl)	1	mg/kg	5	n.d.			-
(Pentabromobiphenyl)	1	mg/kg	5	n.d.			-
(Hexabromobiphenyl)	1	mg/kg	5	n.d.			-
(Heptabromobiphenyl)	1	mg/kg	5	n.d.			-
(Octabromobiphenyl)	7	mg/kg	5	n.d.			-
(Nonabromobiphenyl)	7	mg/kg	5	n.d.			-
(Decabromobiphenyl)	IEC 62321-6: 2015 /	mg/kg	5	n.d.			-
(Sum of PBBs)	(With reference to IEC 62321-	mg/kg	-	n.d.			1000
(Monobromodiphenyl ether)	6: 2015, analysis was performed by	mg/kg	5	n.d.			-
(Dibromodiphenyl ether)	GC/MS.)	mg/kg	5	n.d.			-
(Tribromodiphenyl ether)	1	mg/kg	5	n.d.			-
(Tetrabromodiphenyl ether)	1	mg/kg	5	n.d.			-
(Pentabromodiphenyl ether)	1	mg/kg	5	n.d.			-
(Hexabromodiphenyl ether)	1	mg/kg	5	n.d.			-
(Heptabromodiphenyl ether)	1	mg/kg	5	n.d.			-
(Octabromodiphenyl ether)	7	mg/kg	5	n.d.			-
(Nonabromodiphenyl ether)	1	mg/kg	5	n.d.			-
(Decabromodiphenyl ether)	1	mg/kg	5	n.d.			-
(Sum of PBDEs)	1	mg/kg	-	n.d.			1000



(No.): ETR23900394

(Date): 15-Sep-2023

(Page): 5 of 23

(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)	
(rest items)	(Methed)	(=,		No.1	No.2	No.3	- (=	
(BBP) (Butyl benzyl phthalate (BBP))	IEC 62321-8: 2017 / (With reference to IEC 62321-8: 2017, analysis was performed by GC/MS.)	mg/kg	50	n.d.			1000	
(DBP) (Dibutyl phthalate (DBP))	IEC 62321-8: 2017 / m (With reference to IEC 62321-8: 2017, analysis was performed by GC/MS.)		50	n.d.			1000	
(2-) (DEHP) (Di-(2-ethylhexyl) phthalate (DEHP))	IEC 62321-8: 2017 / m (With reference to IEC 62321-8: 2017, analysis was performed by GC/MS.)		50	n.d.			1000	
(DIBP) (Diisobutyl phthalate (DIBP))	IEC 62321-8: 2017 / (With reference to IEC 62321-8: 2017, analysis was performed by GC/MS.)	mg/kg	50	n.d.			1000	
(DIDP) (Diisodecyl phthalate (DIDP)) (CAS No.: 26761-40-0, 68515-49-1)	IEC 62321-8: 2017 / (With reference to IEC 62321-8: 2017, analysis was performed by GC/MS.)	mg/kg	50	n.d.			-	
(DINP) (Diisononyl phthalate (DINP)) (CAS No.: 28553-12-0, 68515-48-0)	IEC 62321-8: 2017 / (With reference to IEC 62321-8: 2017, analysis was performed by GC/MS.)	mg/kg	50	n.d.			-	
(DNOP) (Di-n- octyl phthalate (DNOP)) (CAS No.: 117-84-0)	IEC 62321-8: 2017 / (With reference to IEC 62321-8: 2017, analysis was performed by GC/MS.)	mg/kg	50	n.d.			-	
(DNPP) (Di-n- pentyl phthalate (DNPP)) (CAS No.: 131-18-0)	IEC 62321-8: 2017 / (With reference to IEC 62321-8: 2017, analysis was performed by GC/MS.)	mg/kg	50	n.d.			-	
(DNHP) (Di-n-hexyl phthalate (DNHP)) (CAS No.: 84-75-3)	IEC 62321-8: 2017 / (With reference to IEC 62321-8: 2017, analysis was performed by GC/MS.)	mg/kg	50	n.d.			-	
(2-) (DMEP) (Bis(2-methoxyethyl) phthalate (DMEP)) (CAS No.: 117-82-8)	IEC 62321-8: 2017 / (With reference to IEC 62321-8: 2017, analysis was performed by GC/MS.)	mg/kg	50	n.d.			-	
(DMP) (Dimethyl phthalate (DMP)) (CAS No.: 131-11- 3)	IEC 62321-8: 2017 / (With reference to IEC 62321-8: 2017, analysis was performed by GC/MS.)	mg/kg	50	n.d.			-	



(No.): ETR23900394

(Date): 15-Sep-2023

(Page): 6 of 23

(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)	
, ,	,			No.1	No.2	No.3	1	
(DIOP) (Diisooctyl phthalate (DIOP)) (CAS No.: 27554-26-3)	IEC 62321-8: 2017 / (With reference to IEC 62321-8: 2017, analysis was performed by GC/MS.)	mg/kg	50	n.d.			-	
(DNNP) (Di-n- nonyl phthalate (DNNP)) (CAS No.: 84-76-4)	IEC 62321-8: 2017 / (With reference to IEC 62321-8: 2017, analysis was performed by GC/MS.)	mg/kg	50	n.d.			-	
(HBCDD) (- HBCDD, - HBCDD, - HBCDD) (Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified (- HBCDD, - HBCDD, - HBCDD)) (CAS No.: 25637-99-4, 3194-55-6 (134237-51-7, 134237-50-6, 134237-52-8))	IEC 62321: 2008 / (With reference to IEC 62321: 2008, analysis was performed by GC/MS.)	mg/kg	5	n.d.			-	
(F) (Fluorine (F)) (CAS No.: 14762- 94-8)		mg/kg	50	n.d.			-	
(CI) (Chlorine (CI)) (CAS No.: 22537-15-1)	BS EN 14582: 2016	mg/kg	50	211			-	
(Br) (Bromine (Br)) (CAS No.: 10097-32-2)	(With reference to BS EN 14582: 2016, analysis was performed by IC.)	mg/kg	50	n.d.			-	
(I) (Iodine (I)) (CAS No.: 14362- 44-8)		mg/kg	50	n.d.			-	
(PFOS and its salts) (CAS No.: 1763-23-1 and its salts)	CEN/TS 15968: 2010 (With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.)	mg/kg	0.01	n.d.			-	
(PFOA and its salts) (CAS No.: 335-67-1 and its salts)	CEN/TS 15968: 2010 (With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.)	mg/kg	0.01	n.d.			-	
(Be) (Beryllium (Be)) (CAS No.: 7440-41-7)	US EPA 3052: 1996 (With reference to US EPA 3052: 1996, analysis was performed by ICP-OES.)	mg/kg	2	n.d.			-	



(No.): ETR23900394

(Date): 15-Sep-2023

(Page): 7 of 23

(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)
(((=)		No.1	No.2	No.3	(=)
(Polycyclic Aromatic 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)		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 G S 2019:01 PA K	mg/kg	0.2	n.d.			
(Chrysene) (CAS No.: 218-01-9)	/ (With reference to AfPS	mg/kg	0.2	n.d.			
(Dibenzo[a,h]anthracene) (CAS No.: 53-70-3)	GS 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		mg/kg	-	n.d.			



(Page): 8 of 23

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



(No.): ETR23900394 (D

(Date): 15-Sep-2023

(Page): 9 of 23

(EVERLIGHT ELECTRONICS CO., LTD.)

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

PAHs Remark

(AfPS): GSPAHs

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

	1 (Category 1)	2 (Category 2)		3 (Cat	egory 3)
(Parameter)	intended to be placed in the mouth, or materials in toys (Directive 2009/48/EC) or	are not in Category intended or foreset skin contact (> 30 short-term repetitives the skin)	eable long-term seconds) or	1 2 ()(Mat covered by Catego intended or foreset term skin contact (30 erials not ry 1 or 2, with eable short-
	years of age with intended long-term skin contact (> 30 seconds))	a. 14 (Use by children under 14)	b. (Other consumer products)	a. 14 (Use by children under 14)	b. (Other consumer products)
Naphthalene	< 1	< 2)	< 10)
Phenanthrene Anthracene Fluoranthene Pyrene	< 1 Sum	< 5 Sum	< 10 Sum	< 20 Sum	< 50 Sum
Benzo[a]anthracene	< 0.2	< 0.2	< 0.5	< 0.5	< 1



(Page): 10 of 23

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



(No.): ETR23900394

(Date): 15-Sep-2023

(Page): 11 of 23

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

CAS No.

335-95-5

(Classification of Substance Concentration)

(Substance Name)

(PFOA-Na)
Perfluorooctanoic acid and its Sodium perfluorooctanoate (PFOA-Na)

(PFOA-K)

salts)

salts (PFOA and its salts)

(CAS No.: 335-67-1 and its



(No.): ETR23900394

(Date): 15-Sep-2023

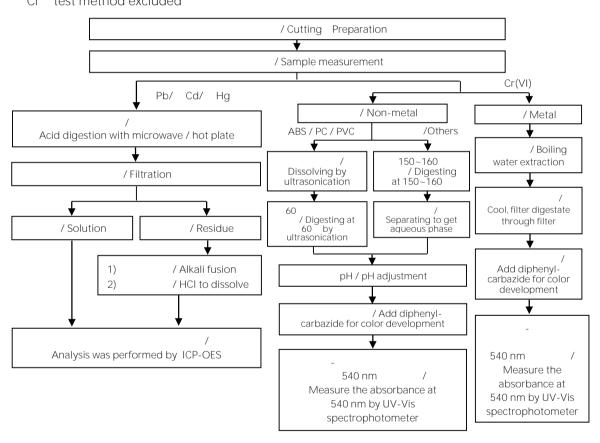
(Page): 12 of 23

(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.): ETR23900394

(Date): 15-Sep-2023

(Page): 13 of 23

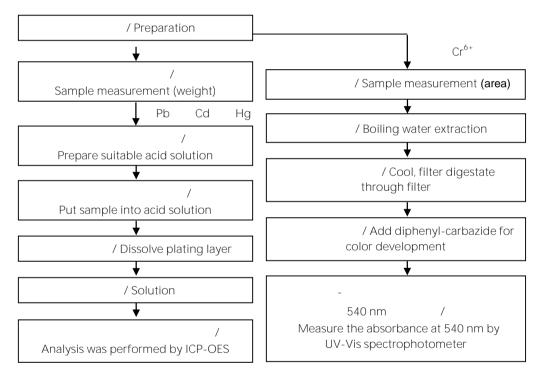
(EVERLIGHT ELECTRONICS CO., LTD.)

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

/ Flow chart of stripping method for metal analysis

/ The plating layer

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





(No.): ETR23900394

(Date): 15-Sep-2023

(Page): 14 of 23

(EVERLIGHT ELECTRONICS CO., LTD.)

6-8 (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.): ETR23900394

(Date): 15-Sep-2023

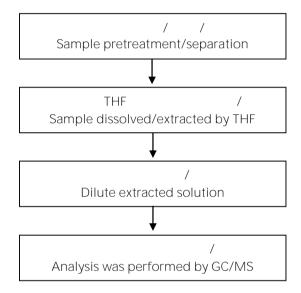
(Page): 15 of 23

(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.): ETR23900394

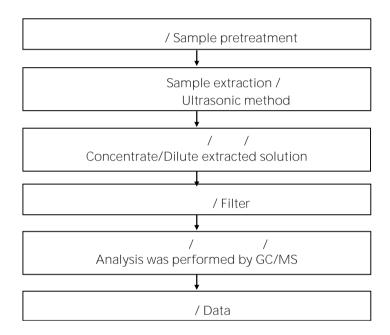
(Date): 15-Sep-2023

(Page): 16 of 23

(EVERLIGHT ELECTRONICS CO., LTD.)

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

/ Analytical flow chart - HBCDD





(No.): ETR23900394

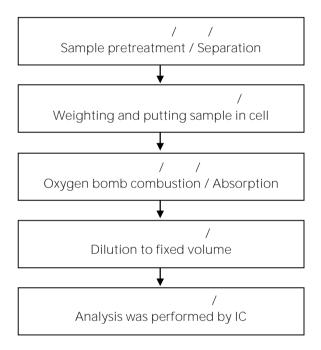
(Date): 15-Sep-2023

(Page): 17 of 23

(EVERLIGHT ELECTRONICS CO., LTD.)

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

/ Analytical flow chart - Halogen





(No.): ETR23900394

(Date): 15-Sep-2023

(Page): 18 of 23

(EVERLIGHT ELECTRONICS CO., LTD.)

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

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

/ Sample pretreatment
/
Sample extraction by ultrasonic extraction
/
/ Concentrate/Dilute extracted solution
/
/Analysis was performed by GC/MS or LC/MS or LC/MS/MS

/ Data



(No.): ETR23900394

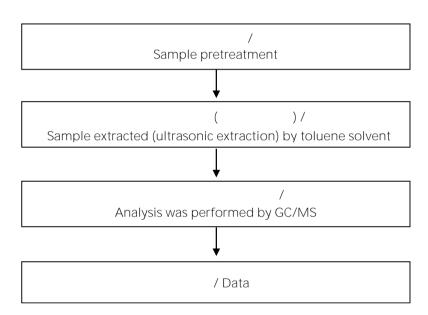
(Date): 15-Sep-2023

(Page): 19 of 23

(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)





(No.): ETR23900394

(Date): 15-Sep-2023

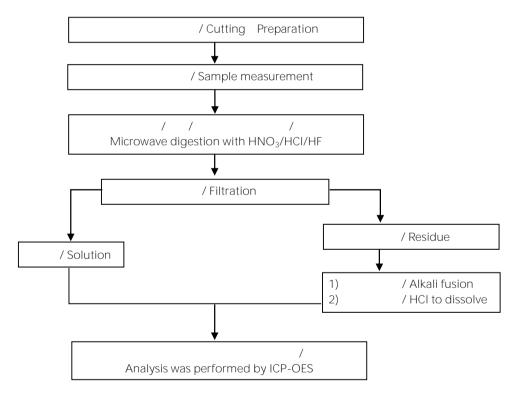
(Page): 20 of 23

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

() / Analytical flow chart of elements (Heavy metal included)

These samples were dissolved totally by pre-conditioning method according to below flow chart.

/Reference method US EPA 3051A US EPA 3052



* US EPA 3051A

/ US EPA 3051A method does not add HF.



(No.): ETR23900394

(Date): 15-Sep-2023

(Page): 21 of 23

(EVERLIGHT ELECTRONICS CO., LTD.)

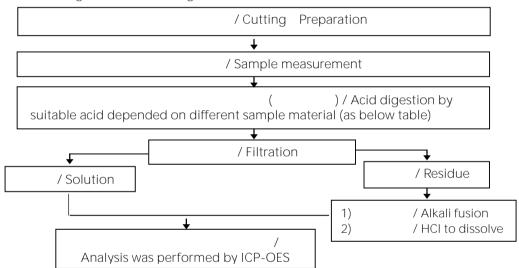
6-8 (NO. 6-8, ZHONGHUA RD., SHULIN DIST., NEW TAIPEI CITY 23860, TAIWAN)

ICP-OES

(Flow chart of digestion for the elements analysis performed by ICP-OES)

/ These samples were dissolved totally by

pre-conditioning method according to below flow chart.



, , , / Steel, copper, aluminum, solder	, , , , Aqua regia, $\rm HNO_3$, $\rm HCI$, $\rm HF$, $\rm H_2O_2$
/ Glass	, / HNO ₃ ,HF
, , , / Gold, platinum, palladium, ceramic	/ Aqua regia
/ Silver	/ HNO ₃
/ Plastic	, , , / H ₂ SO ₄ , H ₂ O ₂ , HNO ₃ , HCl
/ Others	/ Added appropriate reagent to total digestion



(No.): ETR23900394

(Date): 15-Sep-2023

(Page): 22 of 23

(EVERLIGHT ELECTRONICS CO., LTD.)

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

* / . *

(The tested sample / part is marked by an arrow if it's shown on the photo.)







(No.): ETR23900394

(Date): 15-Sep-2023

(Page): 23 of 23

(EVERLIGHT ELECTRONICS CO., LTD.)

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

ETR23900394 NO.3





(End of Report) **