

(No.): ETR24505664

(Date): 14-Jun-2024

(Page): 1 of 24

Product/component Sample

description

Quantity (numbers or weight)

EVERLIGHT P/N SMD A TYPE SERIES,

INDICATING LAMP

Product Lot No Country of Origin **TEST INFORMATION**

China

Sampling Product: PD70-01B/S57/TR7

0.045 g

Y240513AT072G

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

(Sample Receiving Date) (Testing Period)





(No.): ETR24505664

(Date): 14-Jun-2024

(Page): 2 of 24

(EVERLIGHT ELECTRONICS CO., LTD.)

6-8 (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).)

(2) PAHs (As specified by client, to test PAHs and

other item(s).)

(Conclusion) : (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.)

(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) Other consumer products as set by German

Committee on Product Safety (AfPS) GS PAHs.)

(Test Part Description)

No.1 : (BODY)

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

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

(Test Results)

(Test Items)	(Method)	(Unit)	MDL		(Result)		(Limit)
				No.1	No.2	No.3	
(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





(No.): ETR24505664

(Date): 14-Jun-2024

(Page): 3 of 24

(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 ` ′′
(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)		mg/kg	5	n.d.			-
(Nonabromobiphenyl)	JEC / 2221 / , 201 F	mg/kg	5	n.d.			-
(Decabromobiphenyl)	IEC 62321-6: 2015	mg/kg	5	n.d.			-
(Sum of PBBs)	/ (With reference to IEC 62321-6:	mg/kg	-	n.d.			1000
(Monobromodiphenyl ether)	2015, analysis was performed	mg/kg	5	n.d.			-
(Dibromodiphenyl ether)	by GC/MS.)	mg/kg	5	n.d.			-
(Tribromodiphenyl ether)	by GC/Wi3.)	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)	1	mg/kg	5	n.d.			-
(Nonabromodiphenyl ether)	1	mg/kg	5	n.d.			-
(Decabromodiphenyl ether)]	mg/kg	5	n.d.			-
(Sum of PBDEs)]	mg/kg	-	n.d.			1000





(No.): ETR24505664

(Date): 14-Jun-2024

(Page): 4 of 24

(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	
(BBP) (Butyl benzyl phthalate (BBP))		mg/kg	50	n.d.			1000
(DBP) (Dibutyl phthalate (DBP))		mg/kg	50	n.d.			1000
(2-) (DEHP) (Di- (2-ethylhexyl) phthalate (DEHP))		mg/kg	50	n.d.			1000
(DIBP) (Diisobutyl phthalate (DIBP))		mg/kg	50	n.d.			1000
(DIDP) (Diisodecyl phthalate (DIDP)) (CAS No.: 26761-40-0, 68515-49-1)		mg/kg	50	n.d.			-
(DINP) (Diisononyl phthalate (DINP)) (CAS No.: 28553-12-0, 68515-48-0)	IFC / 2221 0, 2017	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	mg/kg	50	n.d.			-
(DNPP) (Di-n- pentyl phthalate (DNPP)) (CAS No.: 131-18-0)	by GC/MS.)	mg/kg	50	n.d.			-
(DNHP) (Di-n-hexyl phthalate (DNHP)) (CAS No.: 84-75-3)		mg/kg	50	n.d.			-
(2-) (DMEP) (Bis(2-methoxyethyl) phthalate (DMEP)) (CAS No.: 117-82-8)		mg/kg	50	n.d.			-
(DMP) (Dimethyl phthalate (DMP)) (CAS No.: 131-11-3)		mg/kg	50	n.d.			-
(DIOP) (Diisooctyl phthalate (DIOP)) (CAS No.: 27554-26-3)		mg/kg	50	n.d.			-





(No.): ETR24505664

(Date): 14-Jun-2024

(Page): 5 of 24

(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	No.2	No.3	
(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 (With reference	mg/kg	50	136			-
(Br) (Bromine (Br)) (CAS No.: 10097-32-2)	to BS EN 14582: 2016, analysis was performed by IC.)	mg/kg	50	n.d.			-
(I) (lodine (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.			-





(No.): ETR24505664

(Date): 14-Jun-2024

(Page): 6 of 24

(EVERLIGHT ELECTRONICS CO., LTD.)

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

(Method)	(Unit)	MDL				(Limit)
()	(=)		No.1	No.2	No.3	,
	mg/kg	0.2	n.d.			
	mg/kg	0.2	n.d.			
	mg/kg	0.2	n.d.			
	mg/kg	0.2	n.d.			
	mg/kg	0.2	n.d.			
	mg/kg	0.2	n.d.			
	mg/kg mg/kg	0.2	n.d. n.d.			
	mg/kg	0.2	n.d.			
	mg/kg	0.2	n.d.			
	mg/kg mg/kg	0.2 0.2	n.d. n.d.			
	mg/kg	0.2	n.d.			





(No.): ETR24505664

(Date): 14-Jun-2024

(Page): 7 of 24

(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	
(Be) (Beryllium (Be)) (CASNo.: 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.			-
(Cd) (Cadmium (Cd))	IEC 62321-5: 2013 (IEC 62321-5: 2013 application of modified	mg/kg	2		n.d.		100
(Pb) (Lead (Pb))	digestion by surface etching, analysis was performed by ICP- OES.)	mg/kg	2		44.9		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 62321-5: 2013,	mg/kg	2			n.d.	100
(Pb) (Lead (Pb))	analysis was performed by ICP-OES.)	mg/kg	2			16.9	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.): ETR24505664

(Date): 14-Jun-2024

(Page): 8 of 24

(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	
	(Hexavalent Chromium) Cr(VI)	IEC 62321-7-1: 2015	µg/cm²	0.1		n.d.	n.d.	-
(#2)		- (With reference to IEC 62321-7- 1: 2015, analysis was performed by UV-VIS.)						

(Test Items)	(Method)	(Unit)	MDL	(Result)	(Limit)
(Be) (Beryllium (Be)) (CAS No.: 7440-41-7)	US EPA 3050B: 1996 (With reference to US EPA 3050B: 1996, analysis was performed by ICP-OES.)	mg/kg	2	n.d.	-

(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 ()		
5.	"" = Not Conducted ()	
6.	(#2) =		
	a. $0.13 \mu g/cm^2$. / The sample is positive for Cr(VI) if the Cr(VI)
	concentration is greater than 0.13	3 μg/cm². The sample α	coating is considered to contain Cr(VI).
	b. n.d. (0.1	10 μg/cm²)	. / The sample is negative for Cr(VI) if Cr(VI) is
	n.d. (concentration less than 0.10	μg/cm²). The coating i	is considered a non-Cr(VI) based coating
	c. 0.10 0.13 µ	g/cm ²	. / The result between 0.10 μg/cm² and
	$0.13\mu g/cm^2$ is considered to be in	nconclusive - unavoida	able coating variations may influence the determination.
7.	ILA C-G 8:09/20	019 (w=	0)
		,	ne decision rule for conformity reporting is based on
			ted in II AC-G8:09/2019. According to this rule, the

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at https://www.sgs.com.tw/terms-of-service and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at https://www.sgs.com.tw/terms-of-service. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

judgement of conformity is based on the comparing test results with limits.)





(No.): ETR24505664

(Date): 14-Jun-2024

(Page): 9 of 24

(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 (Category 3)
(Parameter)	intended to be placed in the mouth, or materials in toys (Directive 2009/48/EC) or	1 30 () (Materials that are not in Category 1, with intended or foreseeable long-term skin contact (> 30 seconds) or short-term repetitive contact with the skin) a. b. 14 (Other (Use by children under 14)	term skin contact (30 seconds))





(No.): ETR24505664

(Date): 14-Jun-2024

(Page): 10 of 24

	(EVERLIGHT ELE	CTRONICS CO., LTD.)			
	6-8 (NO.6-8, ZHON	GHUA RD., SHULIN DIST., NEW TAII	PEI CITY 23860	O, TAIWAN)	
PFAS Remark					
PFAS	PFAS	PFAS			
		PFAS		PFAS	
	(P	FAS	PFAS)	
analyzed spec	cific structure cannot be dis	ve the same specific structure that can stinguished to identify the contribution trations of PFAS acids and its salts with	n from PFAS acid	d or its salts. Therefore, the	
(Gro	oup Name)	(Substance Name)		CAS No.	

29081-56-9

70225-14-8 $(PFOS-NH(OH)_2)$

Perfluorooctane sulfonate diethanolamine salt (PFOS-NH(OH)₂)

> 56773-42-3 $(PFOS-N(C_2H_5)_4)$

Perfluorooctanesulfonic acid,tetraethylammonium salt $(PFOS-N(C_2H_5)_4)$

(PFOS-DDA)

N-decyl-N,N-dimethyldecan-1-aminium 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8heptadecafluorooctane-1-sulfonate (PFOS-DDA)





(Page): 11 of 24





(No.): ETR24505664

(Date): 14-Jun-2024

(Page): 12 of 24





(No.): ETR24505664

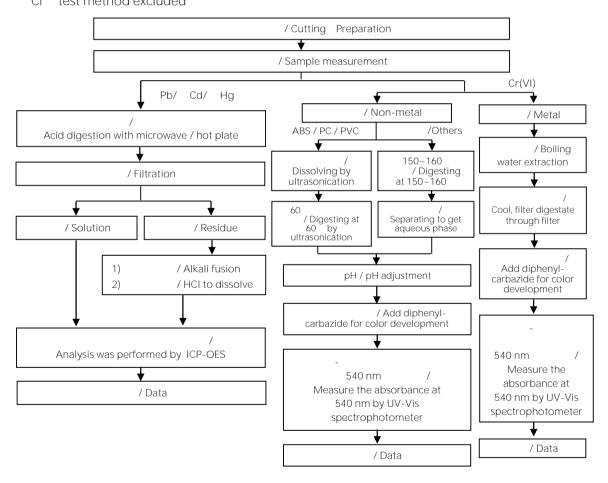
(Date): 14-Jun-2024

(Page): 13 of 24

(EVERLIGHT ELECTRONICS CO., LTD.)
-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. Cr⁶⁺ test method excluded







(No.): ETR24505664

(Date): 14-Jun-2024

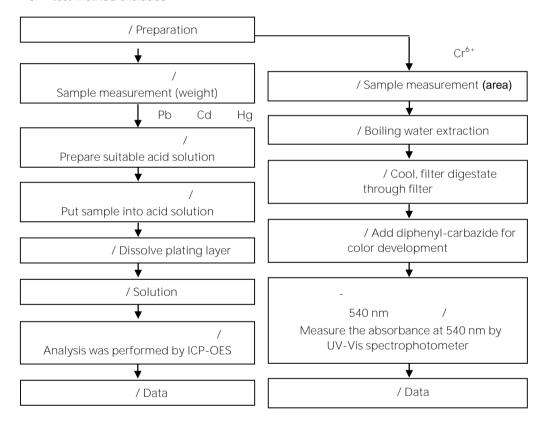
(Page): 14 of 24

(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. Cr^{6+} test method excluded







(No.): ETR24505664

(Date): 14-Jun-2024

(Page): 15 of 24

(EVERLIGHT ELECTRONICS CO., LTD.)
(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

/ Data





(No.): ETR24505664

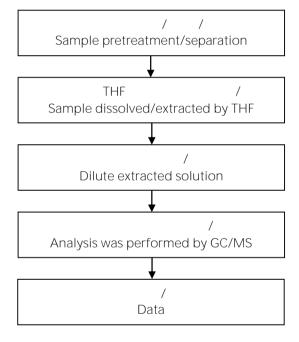
(Date): 14-Jun-2024

(Page): 16 of 24

(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







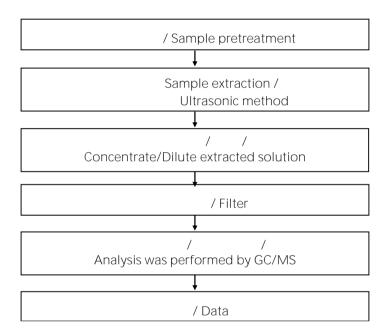
(No.): ETR24505664

(Date): 14-Jun-2024

(Page): 17 of 24

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

/ Analytical flow chart - HBCDD







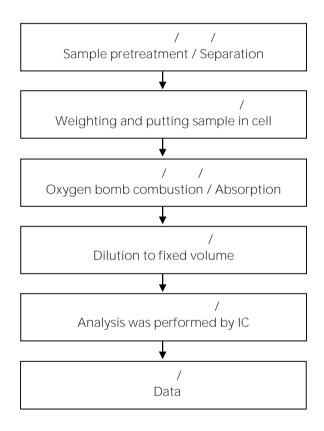
(No.): ETR24505664

(Date): 14-Jun-2024

(Page): 18 of 24

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

/ Analytical flow chart - Halogen







(No.): ETR24505664

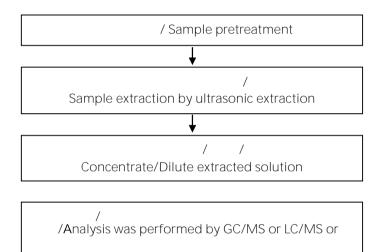
(Date): 14-Jun-2024

(Page): 19 of 24

(EVERLIGHT ELECTRONICS CO., LTD.) b-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.): ETR24505664

(Date): 14-Jun-2024

(Page): 20 of 24

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

Analytical flow chart - PAHs (Polycyclic Aromatic Hydrocarbons)

/

Sample pretreatment

() /
Sample extracted (ultrasonic extraction) by toluene solvent

/
Analysis was performed by GC/MS

/ Data





(No.): ETR24505664

(Date): 14-Jun-2024

(Page): 21 of 24





(No.): ETR24505664

(Date): 14-Jun-2024

(Page): 22 of 24

(EVERLIGHT ELECTRONICS CO., LTD.)

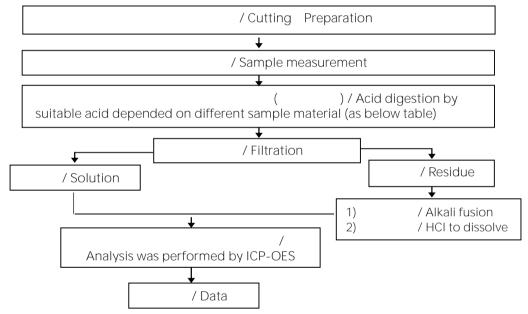
6-8 (NO. 6-8, ZHONGHUA RD., SHULIN DIST., NEW TAIPEI CITY 23860, TAIWAN)

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 , HCI
/ Others	/ Added appropriate reagent to total digestion





(No.): ETR24505664

(Date): 14-Jun-2024

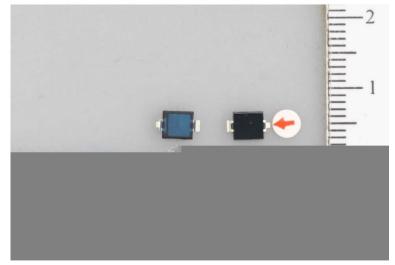
(Page): 23 of 24

(EVERLIGHT ELECTRONICS CO., LTD.)

3 (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.)

ETR24505664 NO.2







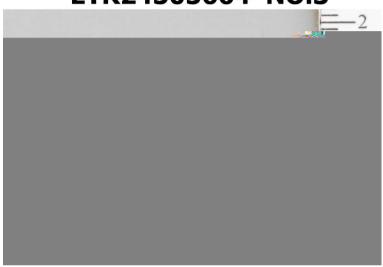
(No.): ETR24505664

(Date): 14-Jun-2024

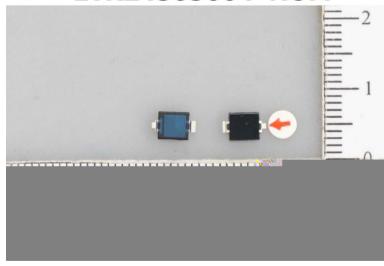
(Page): 24 of 24

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

ETR24505664 NO.3



ETR24505664 NO.4



(End of Report) **

