

Test Report

(EVERLIGHT ELECTRONICS CO., LTD.)

6-8 (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	SMD B TYPE
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-SMD B TYPE SERIES Sampling Product : PD15-22C/TR8-SGS-12-Jul-2023
PRODUCT INFORMATION	
Product/component Sample description	TOUCH PANEL
Quantity (numbers or weight)	0.0142 g
EVERLIGHT P/N	SMD B TYPE SERIES Sampling Product : PD15-22C/TR8
Product Lot No	TYL23032908503
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

(Sample Submitted By)

:

(EVERLIGHT ELECTRONICS CO., LTD.)

(Sample Receiving Date)

:

30-Jun-2023

(Testing Period)

:

30-Jun-2023 to 12-Jul-2023

(Test Results)

:

(Please refer to following pages).



PIN CODE: C8B96F34



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: (1)

(2) PAHs (As specified by client, to test PAHs and other item(s).)

: (1)

(2) (AfPS) 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.)

No.1 :

(Method)	(Unit)	MDL	No.1	(Limit)
IEC 62321-5: 2013	mg/kg	2	n.d.	100
(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)
				No.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)	IEC 62321-6: 2015 / (With reference to IEC 62321-6: 2015, analysis was performed by GC/MS.)	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.	-
(Sum of PBBs)		mg/kg	-	n.d.	1000
(Monobromodiphenyl ether)		mg/kg	5	n.d.	-
(Dibromodiphenyl ether)		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)		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)	mg/kg	5	n.d.	-	
(Sum of PBDEs)	mg/kg	-	n.d.	1000	

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(Test Items)	(Method)	(Unit)	MDL	(Result) No.1	(Limit)
(DBP) (Dibutyl phthalate (DBP))	IEC 62321-8: 2017 / (With reference to IEC 62321-8: 2017, analysis was performed by GC/MS.)	mg/kg	50	n.d.	1000
	IEC 62321-8: 2017 / (With reference to IEC 62321-8: 2017, analysis was performed by GC/MS.)	mg/kg	50	n.d.	1000
(2-ethylhexyl) phthalate (DEHP) (Di-(2-ethylhexyl) phthalate (DEHP))	IEC 62321-8: 2017 / (With reference to IEC 62321-8: 2017, analysis was performed by GC/MS.)	mg/kg	50	n.d.	1000
	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.	-
	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.	-
	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.	-
	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.	-
	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.	-
	IEC 62321-8: 2017 / (With reference to IEC 62321-8: 2017, analysis was performed by GC/MS.)	mg/kg	50	n.d.	-
(2-methoxyethyl) phthalate (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.	-
	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.	-
	IEC 62321-8: 2017 / (With reference to IEC 62321-8: 2017, analysis was performed by GC/MS.)	mg/kg	50	n.d.	-

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(Test Items)	(Method)	(Unit)	MDL	(Result)	(Limit)
				No.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)	BS EN 14582: 2016 (With reference to BS EN 14582: 2016, analysis was performed by IC.)	mg/kg	50	429	-
(Cl) (Chlorine (Cl)) (CAS No.: 22537-15-1)		mg/kg	50	159	-
(Br) (Bromine (Br)) (CAS No.: 10097-32-2)		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.	-

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(Test Items)	(Method)	(Unit)	MDL	(Result)	(Limit)
				No.1	
(Polycyclic Aromatic Hydrocarbons) (PAHs)					
(a) (Benzo[a]pyrene) (CAS No.: 50-32-8)	A FPS GS 2019:01 PAK / (With reference to A FPS GS 2019:01 PAK, analysis was performed by GC/MS.)	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)		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)		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 ()

5. (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.

6. (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. ILAC-G8:09/2019 (w=0)

(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): GS PAHs

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

(Parameter)	1 (Category 1)	2 (Category 2)		3 (Category 3)	
	(< 30) 2009/48/EC (Materials intended to be placed in the mouth, or materials in toys (Directive 2009/48/EC) or articles for children up to 3 years of age with intended long-term skin contact (> 30 seconds))	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)		1 2 3 (Materials not covered by Category 1 or 2, with intended or foreseeable short-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	< 1 Sum	< 5 Sum	< 10 Sum	< 20 Sum	< 50 Sum
Anthracene					
Fluoranthene					
Pyrene					
Benzo[a]anthracene	< 0.2	< 0.2	< 0.5	< 0.5	< 1
Chrysene	< 0.2	< 0.2	< 0.5	< 0.5	< 1
Benzo[b]fluoranthene	< 0.2	< 0.2	< 0.5	< 0.5	

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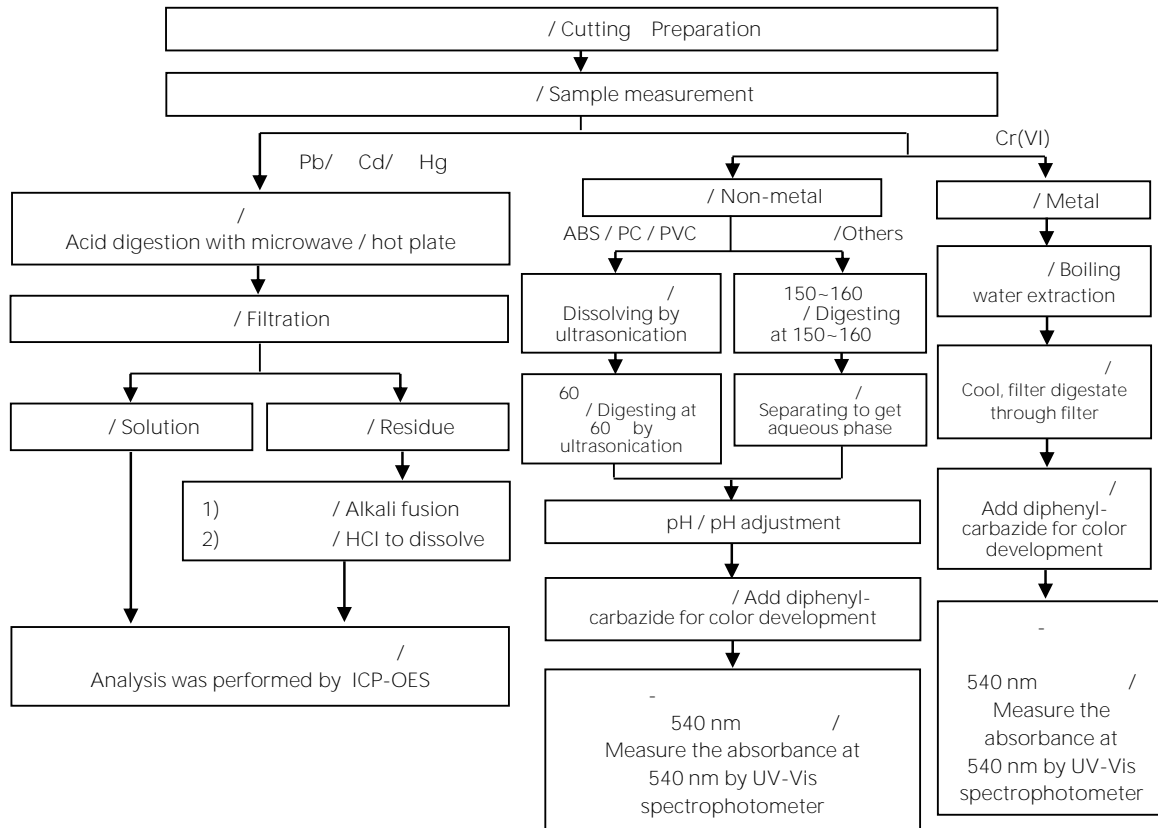
(EVERLIGHT ELECTRONICS CO., LTD.)

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/ Analytical flow chart of heavy metal

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

Cr⁶⁺ test method excluded





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/

/ Analytical flow chart - PBBs/PBDEs

/ First testing process

/ Optional screen process

/ Confirmation process

/ Sample extraction

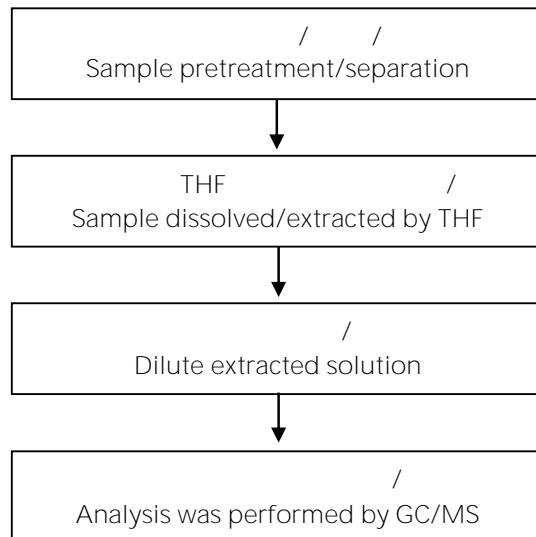
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6-8 (NO. 6-8, ZHONGHUA RD., SHULIN DIST., NEW TAIPEI CITY 23860, TAIWAN)

/ Analytical flow chart - Phthalate

/Test method: IEC 62321-8

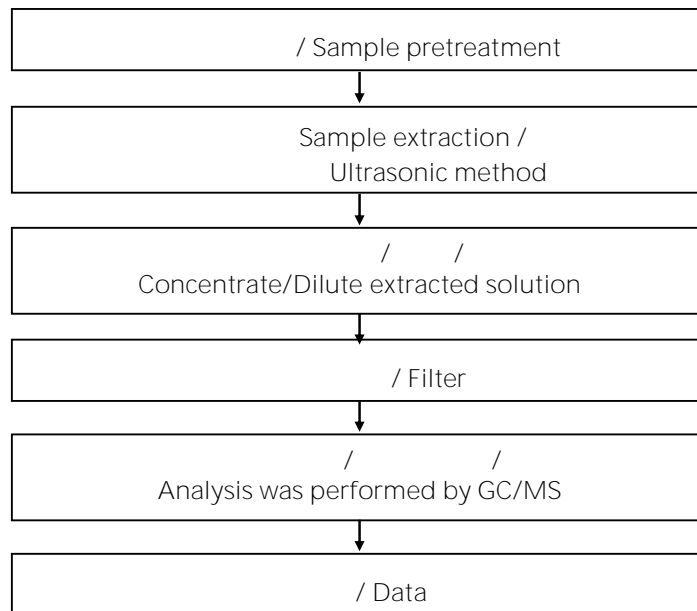


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/ Analytical flow chart - HBCDD

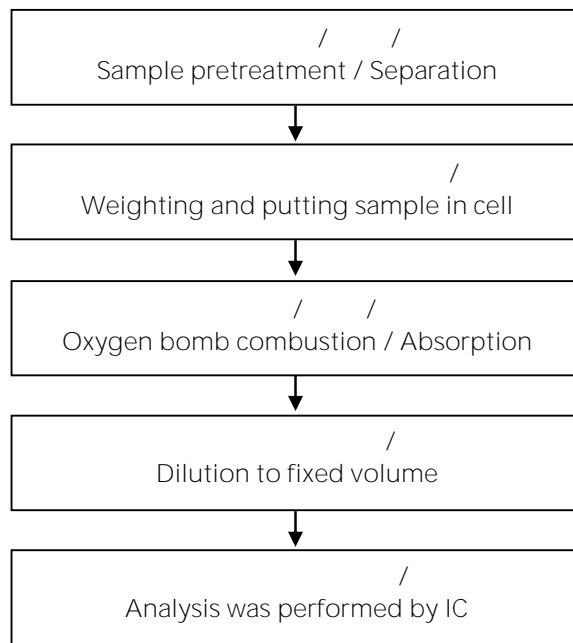


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/ Analytical flow chart - Halogen





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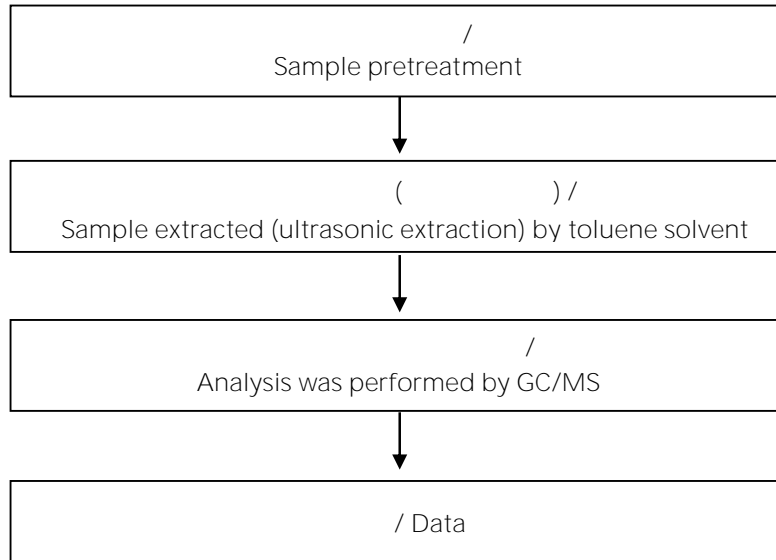
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Analytical flow chart - PAHs (Polycyclic Aromatic Hydrocarbons)



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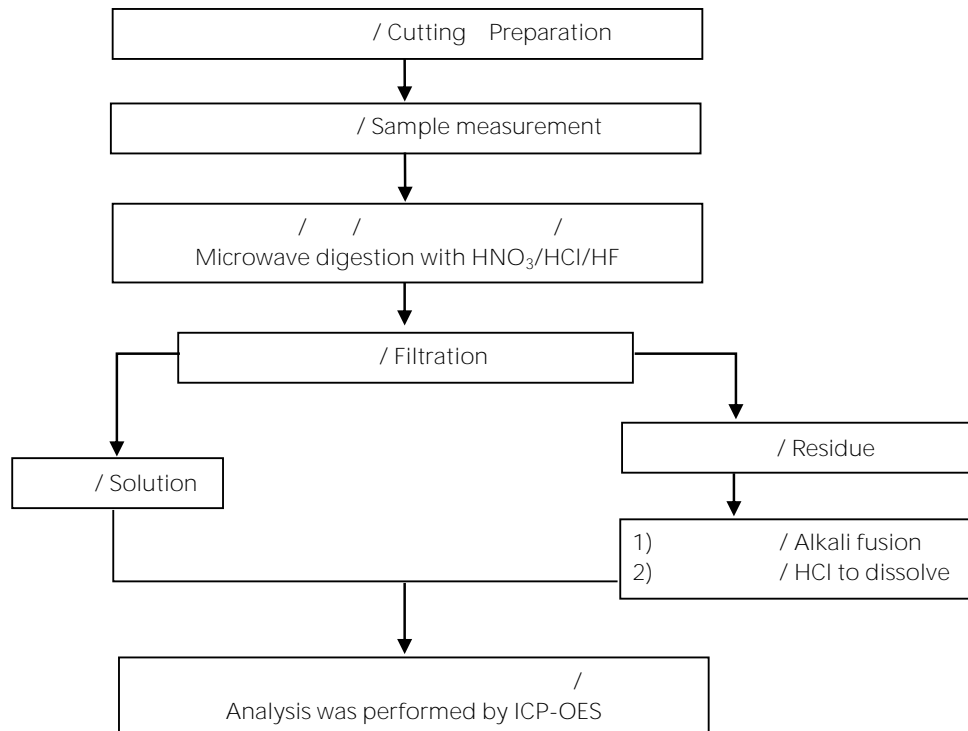
(EVERLIGHT ELECTRONICS CO., LTD.)

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() / 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.

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* / *

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

ETR23605626



** (End of Report) **