

(No.): ETR24900354

(Date): 13-Sep-2024

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(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	IRM		
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: lindawang@everlight.com		
Contact Person	LI LING WANG		
EVERLIGHT REPORT NO	IRM-Hxxx/Vxxx SERIES ,		
	Sampling Product: IRM-V538M3/TR1-SGS-13-Sep-2024		
PRODUCT INFORMATION			
Product/component Sample	Receiver		
description			
Quantity (numbers or weight)	0.0877 g		
EVERLIGHT P/N	IRM-Hxxx/Vxxx SERIES ,		
	Sampling Product : IRM-V538M3/TR1		
Product Lot No	240505V5ATP0401A		
Country of Origin	CHINA		
TEST INFORMATION	<u> </u>		
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) : 03-Sep-2024

(Testing Period) : 03-Sep-2024 to 13-Sep-2024

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





PIN CODE: 096040B8



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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)	1	mg/kg	5	n.d.	-
(Octabromobiphenyl)	1	mg/kg	5	n.d.	-
(Nonabromobiphenyl)		mg/kg	5	n.d.	-
(Decabromobiphenyl)	IEC 62321-6: 2015	mg/kg	5	n.d.	-
(Sum of PBBs)	/ (With reference to	mg/kg	-	n.d.	1000
(Monobromodiphenyl ether)	IEC 62321-6: 2015, analysis was	mg/kg	5	n.d.	-
(Dibromodiphenyl ether)	performed by GC/MS.)	mg/kg	5	n.d.	-
(Tribromodiphenyl ether)		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)	1	mg/kg	5	n.d.	-
(Sum of PBDEs)		mg/kg	-	n.d.	1000



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

(Test Items)	(Method)	(Unit)	MDL	(Result) No.1	(Limit)
(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 GS 2019:01 PAK	mg/kg	0.2	n.d.	
(Chrysene) (CAS No.: 218-01-9)	/ (With reference to	mg/kg	0.2	n.d.	
(Dibenzo[a,h]anthracene) (CAS No.: 53-70-3)	AfPS 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.	



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

(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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PAHs Remark

(AfPS): GSPAHs

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

1 (Category 1) 2 (Category 2) 3 (Category 3)

(Parameter)



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

(Group Name)	(Substance Name)	CAS No.
	(PFOS-Mg) Perfluorooctanesulfonic acid, magnesium salt (PFOS-Mg)	91036-71-4
	(PFO S-N a) Perfluorooctanesulfonic acid, sodium salt (PFOS-Na)	4021-47-0
	Piperidine 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluorooctanesulfonate	71463-74-6
	Perfluorooctanesulfonate (anion)	45298-90-6
	$\begin{array}{c} \text{N,N-} & \text{(1:1) (PFO S-N (C}_2\text{H}_5)_3)} \\ \text{1-Octanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-} \\ \text{heptadecafluoro-, compd. with N,N-diethylethanamine (1:1)} \\ \text{(PFOS-N(C}_2\text{H}_5)_3) \end{array}$	54439-46-2
PFOS, & (PFOS, its salts & derivatives)	N,N,N1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,81- (1:1) (PFO S-N (CH ₃) ₄) Methanaminium, N,N,N-trimethyl-, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-1- octanesulfonate (1:1) (PFOS-N(CH ₃) ₄)	56773-44-5
	1- N,N,N, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,81 - (1:1) (PFO S-N (C ₃ H ₇) ₃ (C ₅ H ₁₁)) 1-Pentanaminium, N,N,N-tripropyl-, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-1- octanesulfonate (1:1) (PFOS-N(C ₃ H ₇) ₃ (C ₅ H ₁₁))	56773-56-9
	1- N,NN 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8 ,81- (1:1) (PFOS-N (C ₄ H ₉) ₃ (CH ₃)) 1-Butanaminium, N,N-dibutyl-N-methyl-, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-1- octanesulfonate (1:1) (PFOS-N(C ₄ H ₉) ₃ (CH ₃))	124472-68-0
	[4-(1,1-)]- 1,1,2,2,3,3,4,4,5,5,6,6,7,7 ,8,8,81- (1:1) lodonium, bis[4-(1,1-dimethylethyl)phenyl]-, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-1- octanesulfonate (1:1)	213740-80-8





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

		CAS No.
(Group Name)	(Substance Name)	005 / 7 4
	(Perfluorooctanoic acid) (PFOA)	335-67-1
	(PFOA-Na) Sodium perfluorooctanoate (PFOA-Na)	335-95-5
	(PFOA-K) Potassium perfluorooctanoate (PFOA-K)	2395-00-8
	(PFOA-Ag) Silver perfluorooctanote (PFOA-Ag)	335-93-3
	(PFOA-F) Perfluorooctanoyl fluoride (PFOA-F)	335-66-0
	(APFO) Ammonium pentadecafluorooctanoate (APFO)	3825-26-1
	(PFOA-Li) Lithium perfluorooctanoate (PFOA-Li)	17125-58-5
	(PFOA-Co) Cobalt perfluorooctanoate (PFOA-Co)	35965-01-6
PFOA, & (PFOA, its salts & derivatives)	(PFOA-Cs) Cesium perfluorooctanoate (PFOA-Cs)	17125-60-9
	$(PFOA-Cr(3^+))$ Octanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-, chromium(3+) ($PFOA-Cr(3^+)$)	68141-02-6
	- (2:1) PFOA-NH($C_4H_{10}N$) Pentadecafluorooctanoic acidpiperazine (2/1)PFOA-NH($C_4H_{10}N$)	423-52-9
	Pentadecafluorooctanoate (anion)	45285-51-6
	Perfluorooctanoic Anhydride	33496-48-9
	N,N,N, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8- (1:1) Ethanaminium, N,N,N-triethyl-, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8- pentadecafluorooctanoate (1:1)	98241-25-9
	Tetramethylammoniumperfluoroctanoat	32609-65-7



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

		CAS No.
(Group Name)	(Substance Name)	
PFOA, & (PFOA, its salts & derivatives)	1- N,N,N, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8- (1:1) 1-Propanaminium, N,N,N-tripropyl-, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluorooctanoate (1:1)	277749-00-5
	2,2,3,3,4,4,5,5,6,6,7,7,8,8,8- (1:1:2) (PFOA-K(H ₂ O) ₂) Octanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8- pentadecafluoro-, potassium salt, hydrate (1:1:2) (PFOA- K(H ₂ O) ₂)	98065-31-7
	2,2,3,3,4,4,5,5,6,6,7,7,8,8,8- (1:1) (PFOA-C ₂ H ₇ N) Octanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8- pentadecafluoro-, compd. with ethanamine (1:1) (PFOA-C ₂ H ₇ N)	1376936-03-6
	$ (1:1) \ (9CI) \ (PFOA-C_5H_5N) $ Octanoic acid, pentadecafluoro-, compd. with pyridine $ (1:1) \ (9CI) \ (PFOA-C_5H_5N) $	95658-47-2
	-1- (1:1) (PFO A - $C_{10}H_{14}N_2$) Pentadecafluorooctanoic acid- 1-phenylpiperazine(1:1) (PFOA- $C_{10}H_{14}N_2$)	1514-68-7
	1- N,N,N 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8- (1:1) (PFOA - C ₁₁ H ₂₆ N) 1-Octanaminium, N,N,N-trimethyl-, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluorooctanoate (1:1) (PFOA - C ₁₁ H ₂₆ N)	927835-01-6



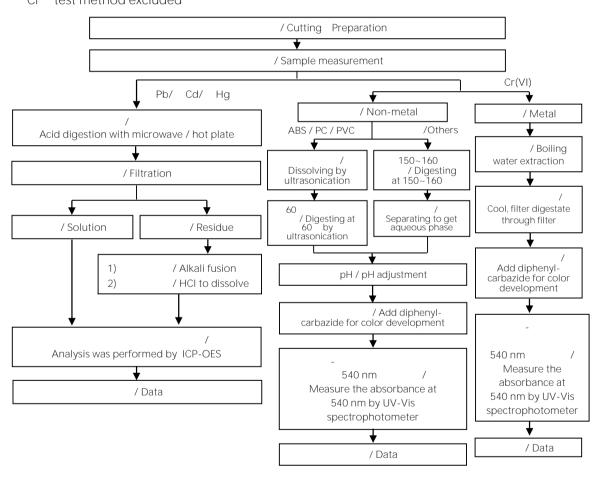
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6-8 (NO. 6-8, ZHONGHUA RD., SHULIN DIST., NEW TAIPEI CITY 23860, TAIWAN)

/ Analytical flow chart of heavy metal

These samples were dissolved totally by pre-conditioning method according to below flow chart. Cr⁶⁺ 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

/ Data



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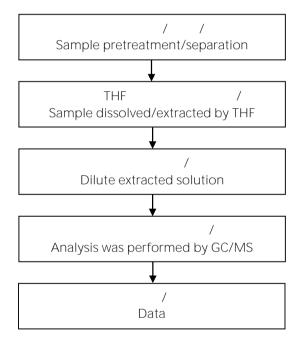
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(EVERLIGHT ELECTRONICS CO., LTD.)
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/ Analytical flow chart - Phthalate

/Test method: IEC 62321-8





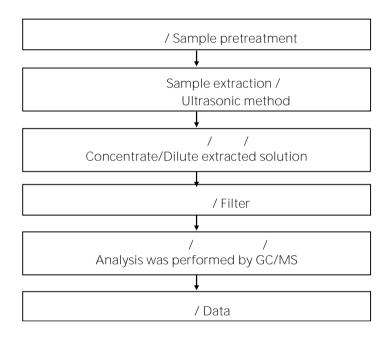
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/ Analytical flow chart - HBCDD





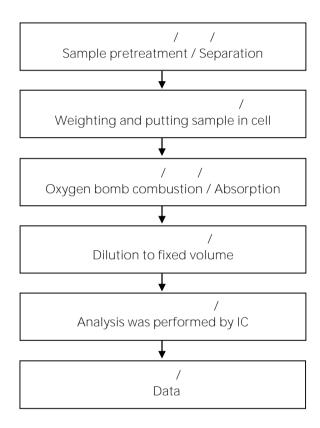
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/ Analytical flow chart - Halogen





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

/ 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



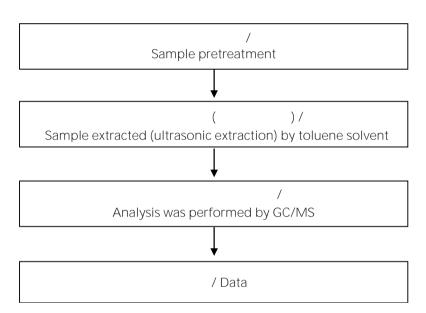
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Analytical flow chart - PAHs (Polycyclic Aromatic Hydrocarbons)





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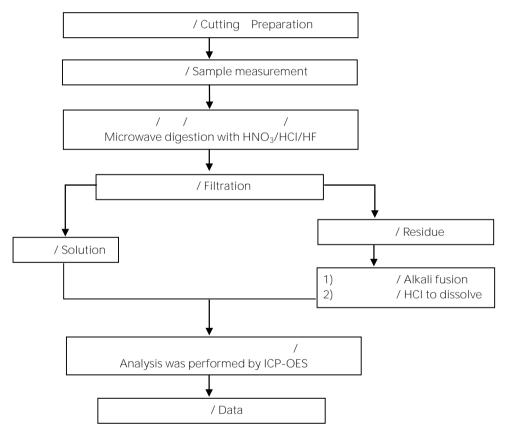
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(NO. 6-8, ZHONGHUA RD., SHULIN DIST., NEW TAIPEI CITY 23860, TAIWAN)

() / 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.



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



* (End of Report) **