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TEST REPORT

Customer	Client	Mid Ocean Brands B.V.
information	Address	7/F., Kings Tower, 111 King Lam Street, Cheung Sha Wan, Kowloon, Hong Kong
	Name of sample	3 in 1 wireless charger
	Test Model No.	MO2729
Sample information	Trade mark	N/A
inioimation	Lot number	(ST) (ST) (ST)
	Manufacturer	114628
	Sample received	April 24, 2025
	Testing date	April 24, 2025 to April 29, 2025
	Test sort	Commission Test
	Requested/item	RoHS directive 2011/65/EU Annex II amending Annex(EU)2015/863. (1) Lead, Cadmium, Mercury, Hexavalent Chromium, PBBs and PBDEs Content. (2) Di-(2-ethylhexyl) phthalate(DEHP), Benzylbutyl phthalate(BBP), Dibutyl phthalate(DBP), Disobutyl phthalate(DIBP) Content.
Test information	Standard/ Foundation	(1)With reference to IEC 62321-3-1:2013, scanning by XRF Spectroscopy Chemical test method: With reference to IEC 62321-5:2013, determination of Cadmium, lead by ICP With reference to IEC 62321-4:2013+AMD1:2017, determination of Mercury by ICP With reference to IEC 62321-7-2:2017&IEC 62321-7-1:2015, determination of Hexavalent Chromium by Colorimetric method. With reference to IEC 62321-6:2015 determination of PBBs and PBDEs by GC-MS (2)With reference to IEC 62321-8:2017, and analysis was performed by GC-MS.
	Conclusion	(1)The tested sample complied with RoHS directive (2011/65/EU). (2)The tested part of submitted sample complied with directive (EU)2015/863
Remark		

Tested By:

Checked By:

Approved By

Date:

2025/04/29

Date:

2025/04/29

Date:



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l'est res	sult: 1. Structural parts			- · · · ·		
No.	COMPONENTS	Item	Results of EDXRF (P/F/D)	Results of Testing (mg/kg)	Chemical testing limit (mg/kg)	Conclusion (P/F)
		Cd	P	N.D.	<100	P
		Cr(VI)	P	N.D.	<1000	P
		Hg	P	N.D.	<1000	P
1	Transparent plastic shaft	Pb	P	N.D.	<1000	P
		PBBs	P	N.D.	<1000	P
		PBDEs	P	N.D.	<1000	P
		Cd	P	N.D.	<100	P
	(21)	Cr(VI)	P	N.D.	<1000	P
•		Hg	P	N.D.	<1000	P
2	Transparent glue	Pb	P	N.D.	<1000	P
		PBBs	P	N.D.	<1000	P
	(::)	PBDEs	P	N.D.	<1000	P
		Cd	P	N.D.	<100	P
		Cr(VI)	P	N.D.	<1000	P
2	Black glue	Hg	P	N.D.	<1000	P
3		Pb	P	N.D.	<1000	P
		PBBs	P	N.D.	<1000	P
		PBDEs	P	N.D.	<1000	P
		Cd	P	N.D.	<100	P
		Cr(VI)	P	N.D.	<1000	P
	Dia da ha a d	Hg	P S	N.D.	<1000	P
4	Black board	Pb	P	N.D.	<1000	P
		PBBs	P	N.D.	<1000	P
		PBDEs	P	N.D.	<1000	P
	(517)	Cd	P	N.D.	<100	P
		Cr(VI)	P	N.D.	<1000	P
5	Bamboo shell	Hg	P	N.D.	<1000	P
3	Dailiooo siicii	Pb	P	N.D.	<1000	P
	((i)	PBBs	P	N.D.	<1000	P
2)		PBDEs	P	N.D.	<1000	P
		Cd	P	N.D.	<100	P
		Cr(VI)	P	N.D.	<1000	P
6	Caldan	Hg	P	N.D.	<1000	P
6	Solder	Pb	P	N.D.	<1000	P
		PBBs	/	/	<1000	/
		PBDEs	/	/	<1000	/



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No.	COMPONENTS	Item	Results of EDXRF (P/F/D)	Results of Testing (mg/kg)	Chemical testing limit (mg/kg)	Conclusion (P/F)
		Cd	P	N.D.	<100	P
		Cr(VI)	P	N.D.	<1000	P
		Hg	P	N.D.	<1000	P
7	Brown inductance	Pb	P	N.D.	<1000	P
		PBBs	P	N.D.	<1000	P
		PBDEs	P	N.D.	<1000	P
		Cd	P	N.D.	<100	P
		Cr(VI)	P	N.D.	<1000	P
		Hg	P	N.D.	<1000	P
8	Black inductance	Pb	P	N.D.	<1000	P
		PBBs	P	N.D.	<1000	Р
		PBDEs	P	N.D.	<1000	P
	(3)	Cd	P	N.D.	<100	P
		Cr(VI)	P	N.D.	<1000	P
	Grey inductance	Hg	P	N.D.	<1000	P
9		Pb	P	N.D.	<1000	P
		PBBs	P	N.D.	<1000	P
		PBDEs	P	N.D.	<1000	P
		Cd	P	N.D.	<100	P
		Cr(VI)	P	N.D.	<1000	P
	(si)	Hg	P	N.D.	<1000	P
10	IC	Pb	P	N.D.	<1000	P
		PBBs	P	N.D.	<1000	Р
		PBDEs	P	N.D.	<1000	P
		Cd	P	N.D.	<100	P
		Cr(VI)	P	N.D.	<1000	P
		Hg	P	N.D.	<1000	P
11	Black inductance	Pb	P	N.D.	<1000	P
		PBBs	P	N.D.	<1000	P
5)		PBDEs	P	N.D.	<1000	P
		Cd	P	N.D.	<100	P
		Cr(VI)	P	N.D.	<1000	P
		Hg	P	N.D.	<1000	P
12	IC feet	Pb	P	N.D.	<1000	P
		PBBs	/	/	<1000	/
		PBDEs	/	/	<1000	/



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No.	COMPONENTS	Item	Results of EDXRF (P/F/D)	Results of Testing (mg/kg)	Chemical testing limit (mg/kg)	Conclusion (P/F)
		Cd	P	N.D.	<100	P
		Cr(VI)	P	N.D.	<1000	P
		Hg	P	N.D.	<1000	P
13	Solder	Pb	P	N.D.	<1000	P
		PBBs	/	/	<1000	/
		PBDEs	/	/	<1000	/
		Cd	P	N.D.	<100	P
		Cr(VI)	P	N.D.	<1000	P
		Hg	P	N.D.	<1000	P
14	Copper wire	Pb	P	N.D.	<1000	P
		PBBs	/	/	<1000	/
		PBDEs	1	/	<1000	/
	6.	Cd	P	N.D.	<100	P
		Cr(VI)	P	N.D.	<1000	P
	Transparent glue	Hg	P	N.D.	<1000	P
15		Pb	P	N.D.	<1000	P
		PBBs	P	N.D.	<1000	P
		PBDEs	P	N.D.	<1000	P
		Cd	P	N.D.	<100	P
		Cr(VI)	P	N.D.	<1000	P
		Hg	P	N.D.	<1000	P
16	Solder	Pb	P	N.D.	<1000	P
		PBBs	/	/	<1000	/
		PBDEs	/	/	<1000	/
		Cd	P	N.D.	<100	P
		Cr(VI)	P	N.D.	<1000	P
		Hg	P	N.D.	<1000	P
17	IC feet	Pb	P	N.D.	<1000	P
		PBBs	1	/	<1000	/
5)		PBDEs		/	<1000	/
		Cd	P	N.D.	<100	P
		Cr(VI)	P	N.D.	<1000	P
		Hg	P	N.D.	<1000	P
18	IC	Pb	P	N.D.	<1000	P
		PBBs	P	N.D.	<1000	P
		PBDEs	P	N.D.	<1000	P



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No.	COMPONENTS	Item	Results of EDXRF (P/F/D)	Results of Testing (mg/kg)	Chemical testing limit (mg/kg)	Conclusion (P/F)
		Cd	P	N.D.	<100	P
		Cr(VI)	P	N.D.	<1000	P
30		Hg	P	N.D.	<1000	P
19	Black chip resistor	Pb	P	N.D.	<1000	P
		PBBs	P	N.D.	<1000	P
		PBDEs	P	N.D.	<1000	P
		Cd	P	N.D.	<100	P
		Cr(VI)	P	N.D.	<1000	P
		Hg	P	N.D.	<1000	P
20	Solder	Pb	P	N.D.	<1000	P
		PBBs	/	/	<1000	/
		PBDEs		/	<1000	/
	6.	Cd	P	N.D.	<100	P
		Cr(VI)	P	N.D.	<1000	P
	Black chip	Hg	P	N.D.	<1000	P
21		Pb	P	N.D.	<1000	P
		PBBs	P	N.D.	<1000	P
		PBDEs	P	N.D.	<1000	P
		Cd	P	N.D.	<100	P
		Cr(VI)	P	N.D.	<1000	P
	(ci)	Hg	P	N.D.	<1000	P
22	Solder	Pb	P	N.D.	<1000	P
		PBBs	/	/	<1000	/
		PBDEs	/	1	<1000	/
		Cd	P	N.D.	<100	P
		Cr(VI)	P	N.D.	<1000	P
		Hg	P	N.D.	<1000	P
23	White inductance	Pb	P	N.D.	<1000	P
		PBBs	P	N.D.	<1000	P
5)		PBDEs	P	N.D.	<1000	P
		Cd	P	N.D.	<100	P
		Cr(VI)	P	N.D.	<1000	P
		Hg	P	N.D.	<1000	P
24	USB metal port	Pb	P	N.D.	<1000	P
		PBBs	/	/	<1000	/
		PBDEs	/	/	<1000	/

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No.	COMPONENTS	Item	Results of EDXRF	Results of Testing	Chemical testing limit	Conclusion (P/F)
		(23)	(P/F/D)	(mg/kg)	(mg/kg)	
		Cd	P	N.D.	<100	P
		Cr(VI)	P	N.D.	<1000	P
25	Black plastic port	Hg	P	N.D.	<1000	P
	Black plastic port	Pb	P	N.D.	<1000	P
5)		PBBs	P	N.D.	<1000	P
		PBDEs	P	N.D.	<1000	P
		Cd	P	N.D.	<100	P
		Cr(VI)	P	N.D.	<1000	P
26	Silver metal feet	Hg	P	N.D.	<1000	P
20	Silver metal feet	Pb	P	N.D.	<1000	P
		PBBs	/	/	<1000	/
		PBDEs	/	/	<1000	/
.(1)	(51)	Cd	P	N.D.	<100	P
3)		Cr(VI)	P	N.D.	<1000	P
		Hg	P	N.D.	<1000	P
27	Black inductance	Pb	P	N.D.	<1000	P
		PBBs	P	N.D.	<1000	P
		PBDEs	P	N.D.	<1000	P
		Cd	P	N.D.	<100	P
		Cr(VI)	P	N.D.	<1000	P
		Hg	P	N.D.	<1000	P
28	Diode	Pb	P	N.D.	<1000	P
		PBBs	P	N.D.	<1000	P
		PBDEs	P	N.D.	<1000	P
		Cd	P	N.D.	<100	P
		Cr(VI)	P	N.D.	<1000	P
		Hg	P	N.D.	<1000	P
29	Grey inductance	Pb	P	N.D.	<1000	P
		PBBs	P	N.D.	<1000	P
		PBDEs	P	N.D.	<1000	P
9	6	Cd	P	N.D.	<100	P
		Cr(VI)	P	N.D.	<1000	P
		Hg	P	N.D.	<1000	P
30	Black chip	Pb	P	N.D.	<1000	P
		PBBs	P	N.D.	<1000	P
		PBDEs	P	N.D.	<1000	P
		LEDES		1	12000	_



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No.	COMPONENTS	Item	Results of EDXRF (P/F/D)	Results of Testing (mg/kg)	Chemical testing limit (mg/kg)	Conclusion (P/F)
		Cd	P	N.D.	<100	P
		Cr(VI)	P	N.D.	<1000	P
		Нд	P	N.D.	<1000	P
31	Black inductance	Pb	P	N.D.	<1000	P
		PBBs	P	N.D.	<1000	P
		PBDEs	P	N.D.	<1000	P
		Cd	P	N.D.	<100	P
		Cr(VI)	P	N.D.	<1000	P
		Hg	P	N.D.	<1000	P
32	Green PCB board	Pb	P	N.D.	<1000	P
		PBBs	P	N.D.	<1000	P
		PBDEs	P	N.D.	<1000	P
		Cd	Р	N.D.	<100	P
		Cr(VI)	P	N.D.	<1000	P
	Feet solder	Hg	Р	N.D.	<1000	P
33		Pb	P	N.D.	<1000	P
		PBBs	/	19	<1000	9
		PBDEs	/	/	<1000	/
		Cd	P	N.D.	<100	P
A		Cr(VI)	P	N.D.	<1000	P
	(ci)	Hg	P S	N.D.	<1000	P
34	Solder	Pb	P	N.D.	<1000	P
		PBBs	/	/	<1000	/
		PBDEs	/	1	<1000	
		Cd	P	N.D.	<100	P
		Cr(VI)	P	N.D.	<1000	P
		Hg	P	N.D.	<1000	P
35	Copper wire	Pb	P	N.D.	<1000	P
		PBBs	/	/	<1000	/
5)		PBDEs		/	<1000	/
		Cd	P	N.D.	<100	P
		Cr(VI)	P	N.D.	<1000	P
		Hg	P	N.D.	<1000	P
36	Wire skin	Pb	P	N.D.	<1000	P
		PBBs	P	N.D.	<1000	P
		PBDEs	P	N.D.	<1000	P



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No.	COMPONENTS	Item	Results of EDXRF (P/F/D)	Results of Testing (mg/kg)	Chemical testing limit (mg/kg)	Conclusion (P/F)
		Cd	P	N.D.	<100	P
		Cr(VI)	P	N.D.	<1000	P
		Hg	P	N.D.	<1000	P
37	Golden plastic tape	Pb	P	N.D.	<1000	P
		PBBs	P	N.D.	<1000	P
		PBDEs	P	N.D.	<1000	P
		Cd	P	N.D.	<100	P
	(517)	Cr(VI)	P	N.D.	<1000	P
20		Hg	P	N.D.	<1000	P
38	Black soft plastic	Pb	P	N.D.	<1000	P
		PBBs	P	N.D.	<1000	P
	(1:3)	PBDEs	P	N.D.	<1000	P
2		Cd	P	N.D.	<100	P
		Cr(VI)	P	N.D.	<1000	P
20	Double faced adhesive	Hg	P	N.D.	<1000	P
39	tape	Pb	P	N.D.	<1000	P
	(3)	PBBs	P	N.D.	<1000	P
		PBDEs	P	N.D.	<1000	P
		Cd	P	N.D.	<100	P
		Cr(VI)	P	N.D.	<1000	P
40	Cileren (Sil)	Hg	PS	N.D.	<1000	P
40	Silver magnet	Pb	P	N.D.	<1000	P
		PBBs	/	/	<1000	/
		PBDEs	/	1	<1000	/



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Remark:

1 It is the result on total Br while test PBBs and PBDEs by EDXRF. It is the result on total Cr while test Hexavalent Chromium by EDXRF $_{\circ}$

2 Results are obtained by EDXRF for primary screening, and chemical testing by ICP (for Cd, Pb, Hg),UV-VIS (Cr(VI)) and GCMS (for PBBs, PBDEs) is recommended to be performed.

Element	Polymer	Metal	Composite Materials
Cd	$P \le 70-3\sigma \le D \le 130+3\sigma \le F$	$P \le 70-3\sigma \le D \le 130+3\sigma \le F$	$P \le 50-3\sigma < D < 150+3\sigma \le F$
Pb	$P \le 700-3\sigma \le D \le 1300+3\sigma \le F$	P≤700-3σ <d<1300+3σ≤f< td=""><td>P≤500-3σ<d<1500+3σ≤f< td=""></d<1500+3σ≤f<></td></d<1300+3σ≤f<>	P≤500-3σ <d<1500+3σ≤f< td=""></d<1500+3σ≤f<>
Hg	$P \le 700-3\sigma \le D \le 1300+3\sigma \le F$	P≤700-3σ <d<1300+3σ≤f< td=""><td>P≤500-3σ<d<1500+3σ≤f< td=""></d<1500+3σ≤f<></td></d<1300+3σ≤f<>	P≤500-3σ <d<1500+3σ≤f< td=""></d<1500+3σ≤f<>
Br	P≤300-3σ <d< td=""><td>A (2)</td><td>P≤250-3σ<d< td=""></d<></td></d<>	A (2)	P≤250-3σ <d< td=""></d<>
Cr	P≤700-3σ <d< td=""><td>P≤700-3σ<d< td=""><td>P≤500-3σ<d< td=""></d<></td></d<></td></d<>	P≤700-3σ <d< td=""><td>P≤500-3σ<d< td=""></d<></td></d<>	P≤500-3σ <d< td=""></d<>

P = PASS; F = FAIL; D = DETECTED;

- 4. mg/kg = ppm; N.D. = NOT DETECTED (<MDL) Pb, Cd, Hg,Cr(VI): 2mg/kg; PBBs, PBDEs: 5mg/kg
- 5. With reference to IEC 62321:-7-1:2015, result on Cr (VI) for metal sample is shown as Positive/Negative. Positive = Presence of Cr(VI) coating, Negative = Absence of Cr(VI) coating
- 6 *According to Annex III of European Council Directive 2011/65/EU, Lead in copper alloy containing up to 4% lead by weight.
- 7 **According to Annex III of European Council Directive 2011/65/EU, Lead in steel alloy containing up to 0.35% lead by weight.
- 8 *According to Annex III of European Council Directive 2011/65/EU, Cadmium and its compounds in electrical contacts is exempted.



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(3) DEHP, BBP, DBP, DIBP

SAMPLE No.		SAMPLE	CONCEN (mg/kg)	ΓRATION		MDL (mg/kg)	REQUIRED LIMIT
TIEW	1	2	3	4	5	(mg/kg)	(mg/kg)
Di-2-ethylhexyl phthalate (DEHP)	ND	ND	ND	ND	ND	30	1000
Dibutyl phthalate (DBP)	ND	ND	ND	ND	ND	30	1000
Benzylbutyl phthalate (BBP)	ND	ND	ND	ND	ND	30	1000
Diisobutyl phthalate (DIBP)	ND	ND	ND	ND	ND	30	1000

SAMPLE No.		SAMPLE	MDL	REQUIRED LIMIT			
ITEM	7	8	9	10	11	(mg/kg)	(mg/kg)
Di-2-ethylhexyl phthalate (DEHP)	ND	ND	ND	ND	ND	30	1000
Dibutyl phthalate (DBP)	ND	ND	ND	ND	ND	30	1000
Benzylbutyl phthalate (BBP)	ND	ND	ND	ND	ND	30	1000
Diisobutyl phthalate (DIBP)	ND	ND	ND	ND	ND	30	1000

SAMPLE No.		SAMPLE	MDL	REQUIRED LIMIT			
ITEM	15	18	19	21	23	(mg/kg)	(mg/kg)
Di-2-ethylhexyl phthalate (DEHP)	ND	ND	ND	ND	ND	30	1000
Dibutyl phthalate (DBP)	ND	ND	ND	ND	ND	30	1000
Benzylbutyl phthalate (BBP)	ND	ND	ND	ND	ND	30	1000
Diisobutyl phthalate (DIBP)	ND	ND	ND	ND	ND	30	1000



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SAMPLE No.	25	SAMPLE 27	MDL (mg/kg)	REQUIRED LIMIT (mg/kg)			
Di-2-ethylhexyl phthalate	23	21	28	29	30		(IIIg/Kg)
(DEHP)	ND	ND	ND	ND	ND	30	1000
Dibutyl phthalate (DBP)	ND	ND	ND	ND	ND	30	1000
Benzylbutyl phthalate (BBP)	ND	ND	ND	ND	ND	30	1000
Diisobutyl phthalate (DIBP)	ND	ND	ND	ND	ND	30	1000

						#		
SAMPLE No.	SAMPLE CONCENTRATION						MDL (mg/lrg)	REQUIRED
ITEM	(mg/kg)							LIMIT
	31	32	36	37	38	39	(mg/kg)	(mg/kg)
Di-2-ethylhexyl phthalate (DEHP)	ND	ND	ND	ND	ND	ND	30	1000
Dibutyl phthalate (DBP)	ND	ND	ND	ND	ND	ND	30	1000
Benzylbutyl phthalate (BBP)	ND	ND	ND	ND	ND	ND	30	1000
Diisobutyl phthalate (DIBP)	ND	ND	ND	ND	ND	ND	30	1000

Note: MDL = Method Detection Limit, ND=not detected (<Method Detection Limit).



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Sample photo

Appearance photograph of EUT



Appearance photograph of EUT

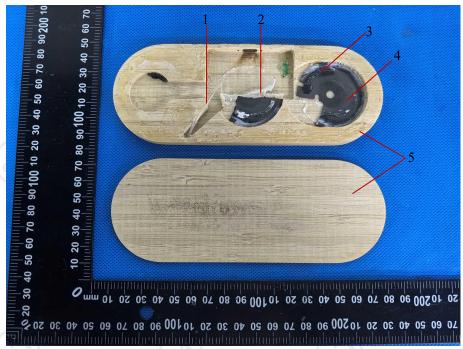




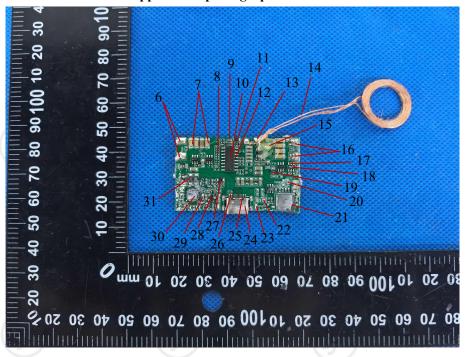
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Sample photo

Appearance photograph of EUT



Appearance photograph of EUT

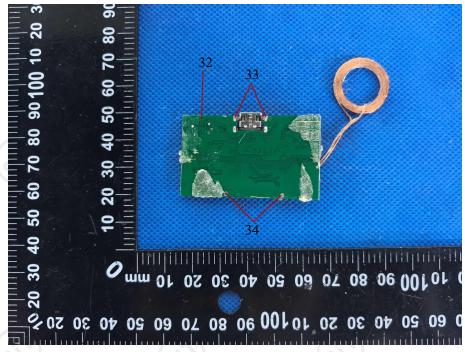




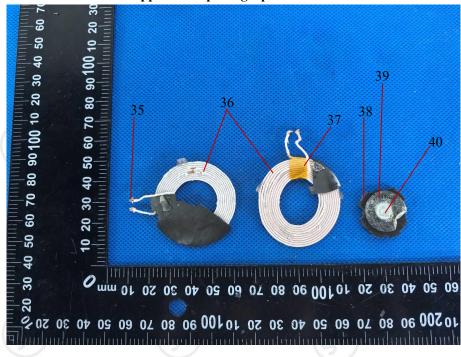
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Sample photo

Appearance photograph of EUT



Appearance photograph of EUT





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List of apparatus

No.	Name	Model	Calibration Valid Date	USE(√)		
1	ICP-OES	VISTA-MPX	2025/06/28	1		
2	GC-MS	5975i	2025/06/16	√		
3	UV-Vis	Lambda 25	2025/06/16	√		
5 4	XRF	EDX3000B	2025/06/22	√		

***** END OF REPORT *****

Statement:

- 1. The test report is considered invalidated without approval signature.
- 2. The result(s) shown in this report refer only to the sample(s) tested.
- 3. Without written approval of SIT, this report can't be reproduced except in full.
- 4. The sample(s) and sample information was/were provided by the client who should be responsible for the authenticity which SIT hasn't verified.