

TEST REPORT

Client Name	SHENZHEN SHENXINHUI ELECTRONICS Co., LTD.
Name of product	Food thermometer
Manufacturer	SHENZHEN SHENXINHUI ELECTRONICS Co., LTD.
Model	CH-102 CH-103 CH-105 CH-106 CH-107 CH-201 CH-202 CH-203 CH-204 CH-227
Test sort	Commission Test



CCIC Southern Electronic Product Testing (Shenzhen) Co., Ltd.

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Customer information	Client	SHENZHEN SHENXINHUI ELECTRONICS Co., LTD.					
	Address	3 rd , Block B, No.1 Building, No 1 ShaJing Road, Baoan, Shenzhen, China					
Sample information	Name of sample	Food thermometer					
	Model	CH-102 CH-203	CH-103 CH-204	CH-105 CH-227	CH-106	CH-107	CH-201 CH-202
	Lot number	----					
	Material	----					
	Manufacturer	SHENZHEN SHENXINHUI ELECTRONICS Co., LTD.					
	Address	3 rd , Block B, No.1 Building, No 1 ShaJing Road, Baoan, Shenzhen, China					
Test information	Sample received	Dec. 15, 2016					
	Testing date	Dec. 15, 2016~ Dec. 21, 2016					
	Test sort	Commission Test					
	Requested/item	(1) RoHS directive 2011/65/EU (2) Battery directive 2006/66/EC & Amendment 2013/56/EU					
	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 Lead, Cadmium, by ICP With reference to IEC 62321-4:2013, determination of Mercury by ICP With reference to IEC 62321:2008& IEC 62321-7-1:2015, determination of Hexavalent Chromium by Colorimetric method With reference to IEC 62321-6:2015, determination of PBBs, PBDEs by GC-MS. (2) With reference to EPA3050B:1996, EPA3052:1996, EPA6010D:2014, Analysis was performed by ICP-OES					
	Conclusion	The tested parts of submitted sample complied with RoHS directive (2011/65/EU). The battery of submitted sample complied with the 2006/66/EC battery directive & Amendment 2013/56/EU.					
Remark	----						

Tested By:

YangSuPing

Checked By:

Sifeifei

Approved By:

Calvin

Date:

Dec. 26, 2016

Date:

Dec. 26, 2016

Date:

Dec. 26, 2016



(1) Test result of RoHS:

No.	COMPONENTS	Item	Results of EDXRF (P/F/D)	Results of Testing (mg/kg)	Chemical testing limit (mg/kg)	Conclusion (P/F)
1	Orange plastic bottom cover	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	P	/	<1000	P
		PBDEs	P	/	<1000	P
2	Orange plastic cover	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	P	/	<1000	P
		PBDEs	P	/	<1000	P
3	Silvery label	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	P	/	<1000	P
		PBDEs	P	/	<1000	P
4	Black soft rubber plug	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	P	/	<1000	P
		PBDEs	P	/	<1000	P
5	White soft rubber plug	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	P	/	<1000	P
		PBDEs	P	/	<1000	P
6	Orange plastic face-piece	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	P	/	<1000	P
		PBDEs	P	/	<1000	P



No.	COMPONENTS	Item	Results of EDXRF (P/F/D)	Results of Testing (mg/kg)	Chemical testing limit (mg/kg)	Conclusion (P/F)
7	Double-sided gumming	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	P	/	<1000	P
		PBDEs	P	/	<1000	P
8	Window transparent plastic	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	P	/	<1000	P
		PBDEs	P	/	<1000	P
9	Window silvery coating	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	P	/	<1000	P
		PBDEs	P	/	<1000	P
10	Window red coating	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	P	/	<1000	P
		PBDEs	P	/	<1000	P
11	Countersink screw	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	/	/	<1000	/
		PBDEs	/	/	<1000	/
12	Pan head screw	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	/	/	<1000	/
		PBDEs	/	/	<1000	/



No.	COMPONENTS	Item	Results of EDXRF (P/F/D)	Results of Testing (mg/kg)	Chemical testing limit (mg/kg)	Conclusion (P/F)
13	Mainboard PCB board	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	D	N.D.	<1000	P
		PBDEs	D	N.D.	<1000	P
14	Mainboard soldering tin	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	/	/	<1000	/
		PBDEs	/	/	<1000	/
15	Mainboard spring	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	/	/	<1000	/
		PBDEs	/	/	<1000	/
16	Metal sheet	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	/	/	<1000	/
		PBDEs	/	/	<1000	/
17	IC body	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	D	N.D.	<1000	P
		PBDEs	D	N.D.	<1000	P
18	C3 SMD capacitance	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	P	/	<1000	P
		PBDEs	P	/	<1000	P



No.	COMPONENTS	Item	Results of EDXRF (P/F/D)	Results of Testing (mg/kg)	Chemical testing limit (mg/kg)	Conclusion (P/F)
19	K1 metal cover	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	/	/	<1000	/
		PBDEs	/	/	<1000	/
20	K1 white plastic button	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	P	/	<1000	P
		PBDEs	P	/	<1000	P
21	K1 black plastic cover	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	P	/	<1000	P
		PBDEs	P	/	<1000	P
22	K1 inner metal sheet	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	/	/	<1000	/
		PBDEs	/	/	<1000	/
23	K1 pin	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	/	/	<1000	/
		PBDEs	/	/	<1000	/
24	Small PCB board	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	D	N.D.	<1000	P
		PBDEs	D	N.D.	<1000	P



No.	COMPONENTS	Item	Results of EDXRF (P/F/D)	Results of Testing (mg/kg)	Chemical testing limit (mg/kg)	Conclusion (P/F)
25	Switch black plastic cover	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	D	N.D.	<1000	P
		PBDEs	D	N.D.	<1000	P
26	Switch black plastic dial button	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	P	/	<1000	P
		PBDEs	P	/	<1000	P
27	Switch reed	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	/	/	<1000	/
		PBDEs	/	/	<1000	/
28	Switch pin	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	/	/	<1000	/
		PBDEs	/	/	<1000	/
29	Hot melt adhesive	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	P	/	<1000	P
		PBDEs	P	/	<1000	P
30	Red wire jacket	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	P	/	<1000	P
		PBDEs	P	/	<1000	P



No.	COMPONENTS	Item	Results of EDXRF (P/F/D)	Results of Testing (mg/kg)	Chemical testing limit (mg/kg)	Conclusion (P/F)
31	Metal wire core	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	/	/	<1000	/
		PBDEs	/	/	<1000	/
32	Black bush	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	P	/	<1000	P
		PBDEs	P	/	<1000	P
33	Transparent wire jacket	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	P	/	<1000	P
		PBDEs	P	/	<1000	P
34	Metal wire core	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	/	/	<1000	/
		PBDEs	/	/	<1000	/
35	Glass probe	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	#5.433 × 10 ³	/	<1000	P
		PBBs	P	/	<1000	P
		PBDEs	P	/	<1000	P
36	Brown rubber ring	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	P	/	<1000	P
		PBDEs	P	/	<1000	P



No.	COMPONENTS	Item	Results of EDXRF (P/F/D)	Results of Testing (mg/kg)	Chemical testing limit (mg/kg)	Conclusion (P/F)
37	Red wire jacket	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	P	/	<1000	P
		PBDEs	P	/	<1000	P
38	Brown wire jacket	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	P	/	<1000	P
		PBDEs	P	/	<1000	P
39	Yellow wire jacket	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	P	/	<1000	P
		PBDEs	P	/	<1000	P
40	Blue wire jacket	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	P	/	<1000	P
		PBDEs	P	/	<1000	P
41	Metal wire core	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	/	/	<1000	/
		PBDEs	/	/	<1000	/
42	Display black sponge mat	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	P	/	<1000	P
		PBDEs	P	/	<1000	P



No.	COMPONENTS	Item	Results of EDXRF (P/F/D)	Results of Testing (mg/kg)	Chemical testing limit (mg/kg)	Conclusion (P/F)
43	Display white sponge mat	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	P	/	<1000	P
		PBDEs	P	/	<1000	P
44	Display black heat-conducting block gine	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	P	/	<1000	P
		PBDEs	P	/	<1000	P
45	Display white face silvery bottom pad pasting	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	P	/	<1000	P
		PBDEs	P	/	<1000	P
46	Display polaroid	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	P	/	<1000	P
		PBDEs	P	/	<1000	P
47	Display glass sheet	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	P	/	<1000	P
		PBDEs	P	/	<1000	P
48	Display orange plastic turntable	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	P	/	<1000	P
		PBDEs	P	/	<1000	P



No.	COMPONENTS	Item	Results of EDXRF (P/F/D)	Results of Testing (mg/kg)	Chemical testing limit (mg/kg)	Conclusion (P/F)
49	Display metal probe	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	/	/	<1000	/
		PBDEs	/	/	<1000	/
50	Display black sponge mat	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	P	/	<1000	P
		PBDEs	P	/	<1000	P
51	Display white flexible glue gasket	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	P	/	<1000	P
		PBDEs	P	/	<1000	P
52	Display black plastic bottom cover	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	P	/	<1000	P
		PBDEs	P	/	<1000	P
53	Display black plastic cover	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	P	/	<1000	P
		PBDEs	P	/	<1000	P
54	Display black plastic face-piece	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	P	/	<1000	P
		PBDEs	P	/	<1000	P



No.	COMPONENTS	Item	Results of EDXRF (P/F/D)	Results of Testing (mg/kg)	Chemical testing limit (mg/kg)	Conclusion (P/F)
55	Display black plastic turnplate	Cd	P	/	<100	P
		Cr(VI)	P	/	<1000	P
		Hg	P	/	<1000	P
		Pb	P	/	<1000	P
		PBBs	P	/	<1000	P
		PBDEs	P	/	<1000	P

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.
- (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, if the concentration exceeds the below warning value (unit:mg/kg)

Element	Polymer	Metal	Composite Materials
Cd	$P \leq 70 - 3\sigma < D < 130 + 3\sigma \leq F$	$P \leq 70 - 3\sigma < D < 130 + 3\sigma \leq F$	$P \leq 50 - 3\sigma < D < 150 + 3\sigma \leq F$
Pb	$P \leq 700 - 3\sigma < D < 1300 + 3\sigma \leq F$	$P \leq 700 - 3\sigma < D < 1300 + 3\sigma \leq F$	$P \leq 500 - 3\sigma < D < 1500 + 3\sigma \leq F$
Hg	$P \leq 700 - 3\sigma < D < 1300 + 3\sigma \leq F$	$P \leq 700 - 3\sigma < D < 1300 + 3\sigma \leq F$	$P \leq 500 - 3\sigma < D < 1500 + 3\sigma \leq F$
Br	$P \leq 300 - 3\sigma < D$	----	$P \leq 250 - 3\sigma < D$
Cr	$P \leq 700 - 3\sigma < D$	$P \leq 700 - 3\sigma < D$	$P \leq 500 - 3\sigma < D$

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

- (3) mg/kg = ppm; N.D. = NOT DETECTED (<MDL) Pb, Cd, Hg, Cr(VI): 2mg/kg; PBBs, PBDEs: 5mg/kg
- (4) According 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
- (5) # According to Annex III of European Council Directive 2011/65/EU, Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound is exempted.

(2) Test result of battery:

ITEM	SAMPLE No.	SAMPLE CONCENTRATION (mg/kg)	MDL (mg/kg)	REQUIRED LIMIT (mg/kg)
	1			
Cd	N.D.		2	<20
Hg	N.D.		2	<5
Pb	N.D.		2	<40*
Result(P/F)	P		----	

Note:

MDL = Method Detection Limit, N.D. = NOT DETECTED (<MDL) .

*According to 2006/66/EC battery directive & Amendment 2013/56/EU, if the lead content is more than 40ppm(40mg/kg), the sample must be marked "Pb"

Sample photo

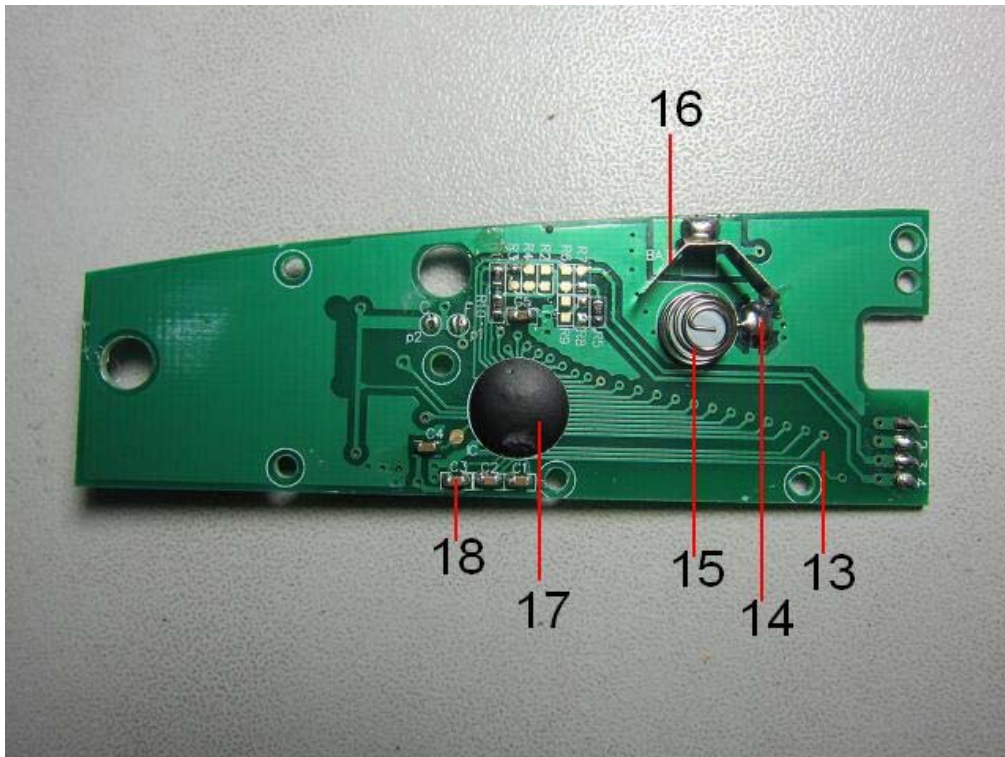
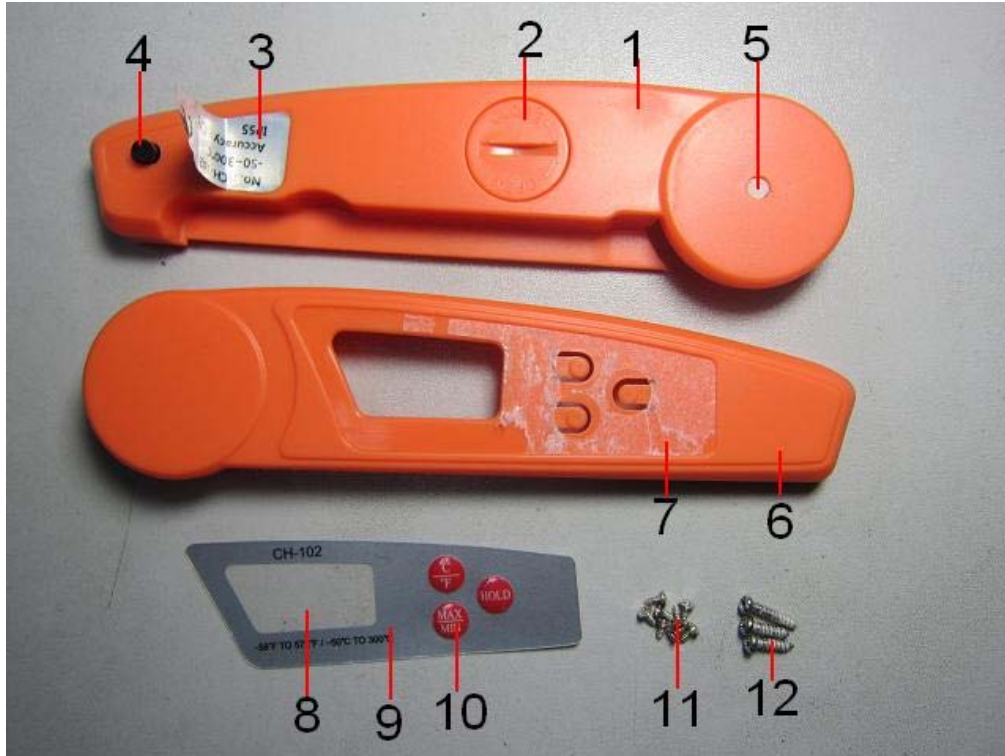


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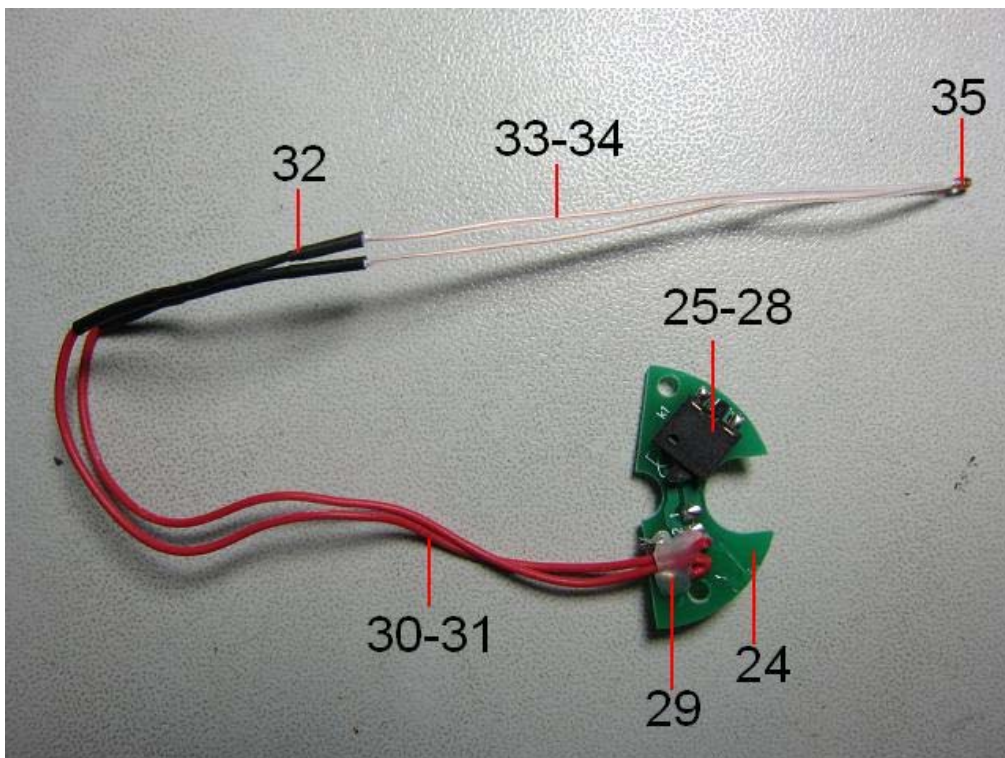
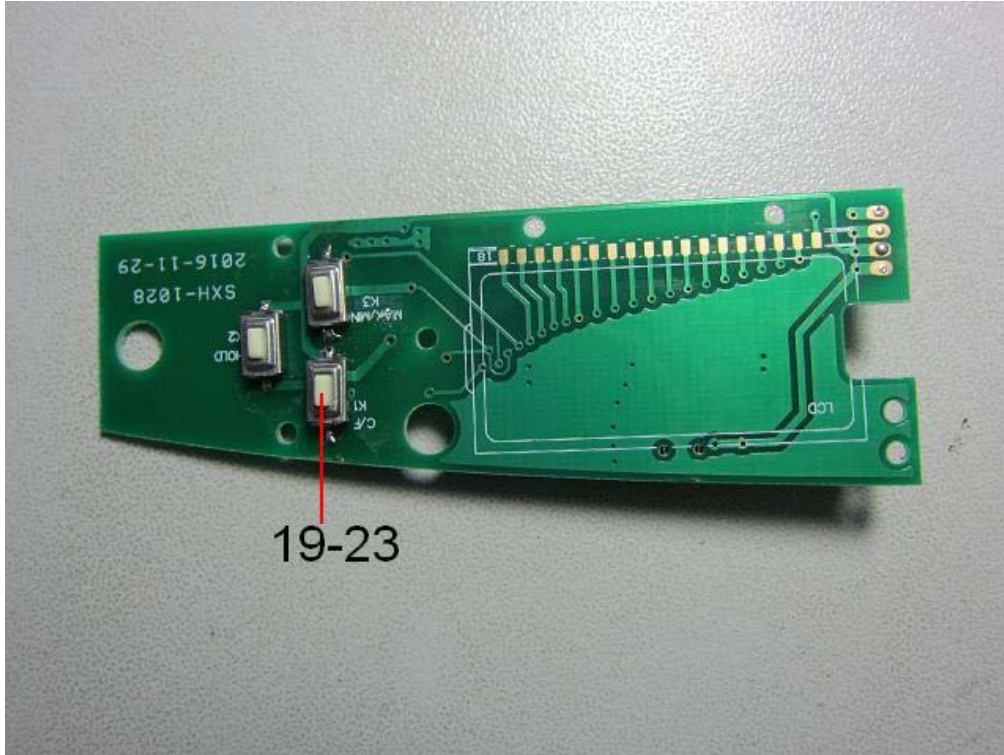


Battery

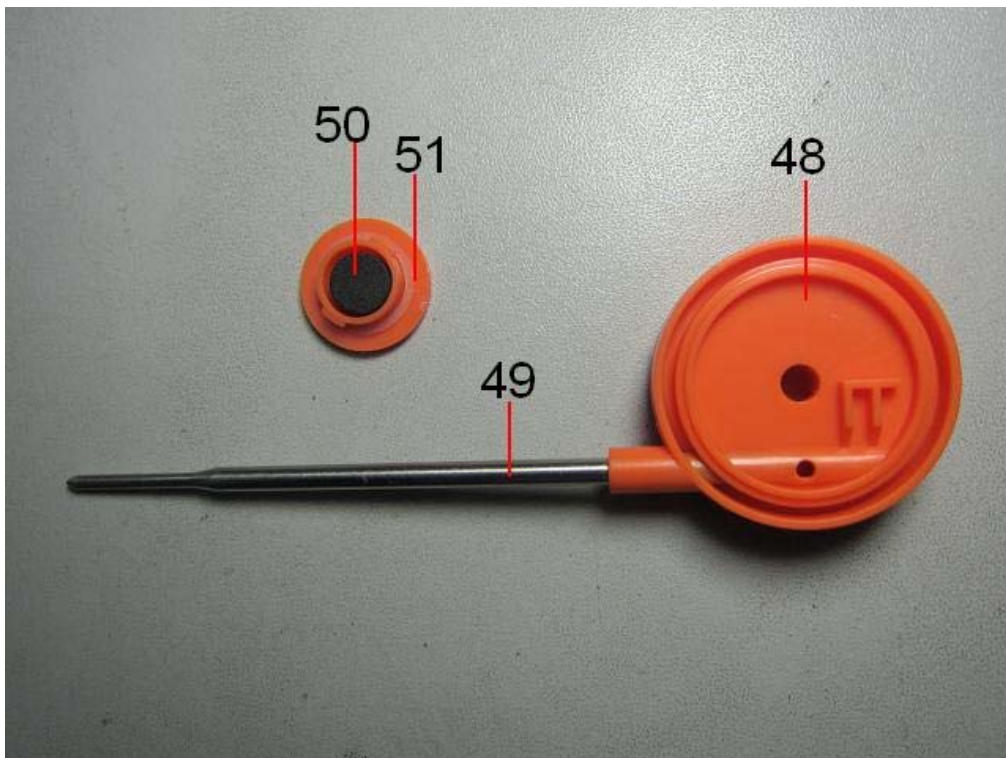
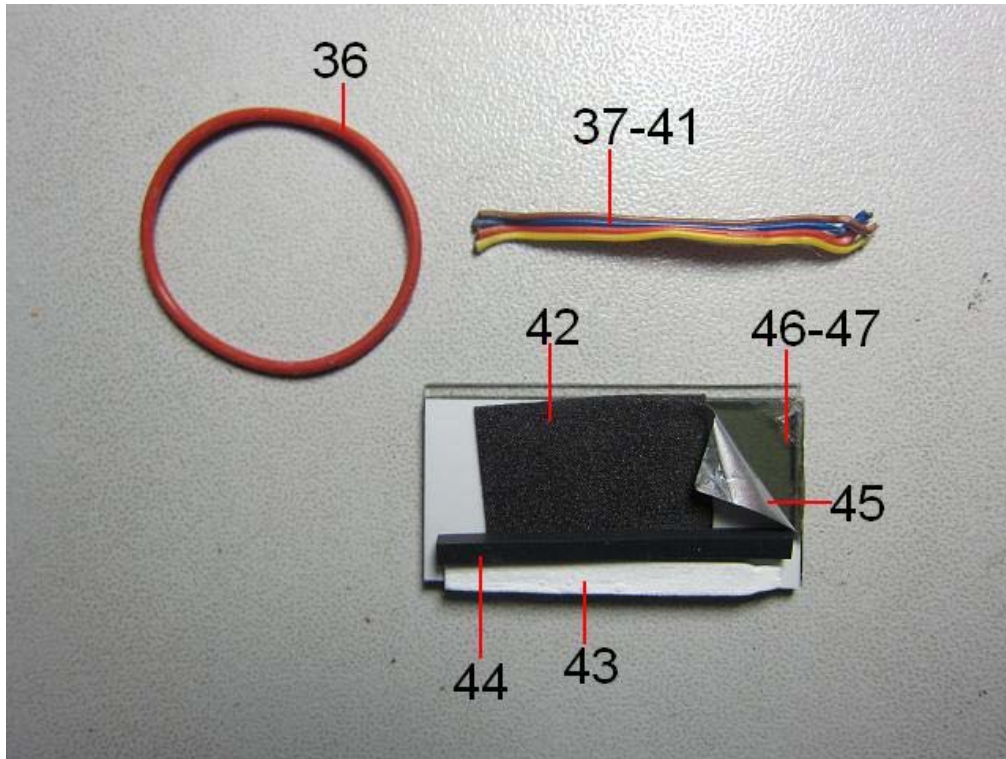
Detailed Split Chart



Detailed Split Chart



Detailed Split Chart



Detailed Split Chart





List of apparatus:

No.	Name	Model	Calibration Valid Date	USE(√)
1	ICP-OES	VISTA-MPX	2017/07/24	√
2	GC-MS	5975i	2017/07/24	√
3	UV-Vis	Lambda 25	2017/05/22	√
4	XRF	EDX3000B	2017/05/22	√

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

STATEMENT

1. The test report is invalid without stamp of laboratory.
2. The test report is invalid without signature of person(s) testing and authorizing.
3. The test report is invalid if erased and corrected.
4. Test results of the report is valid to the test samples if sampling by client.
5. “☆” item to be outside the scope of authorized by CNAS.
6. The test report shall not be reproduced except in full, without written approval of the laboratory.
7. If there is any objection to report, the client should inform issuing laboratory within 15 days from the date of receiving test report.