Applicant: Radiolink Electronic Limited

Contact information: 3/F, BLD2,KaiFeng Road 28#, ShangMeiLinFutian, ShenZhen, GuangDong, China

The following sample(s) was (were) submitted and identified by client as:

Sample Description	:	Radio control
Model No.	:	T8S
Sample Received Date	:	Feb. 25, 2020
Testing Period	:	From Feb. 25, 2020 to Mar. 3, 2020
Test Request	:	Please refer to next page(s).
Test Result(s)	:	Please refer to next page(s).

Summary of test results:

TEST REQUEST	**CONCLUSION**
RoHS Directive 2011/65/EU and its subsequent amendments&Directive (EU) 2015/863	
(1) To determineLead (Pb), Cadmium(Cd), Mercury(Hg), Hexavalent Chromium(Cr(VI)), Polybrominated Biphenyls(PBBs) and Polybrominated DiphenylEthers(PBDEs) content by screening test and chemical test	**PASS**
(2) To determinePhthalates (DBP, BBP, DEHP, DIBP)content by chemical test	**PASS**

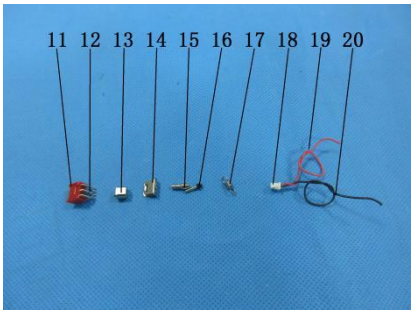
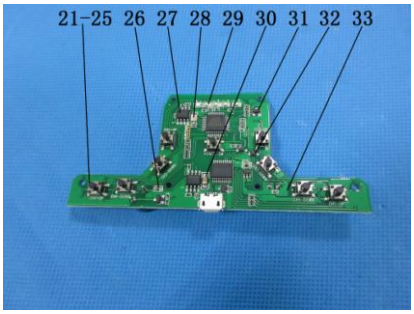
Test Location: Shenzhen UONE Test Co., Ltd.

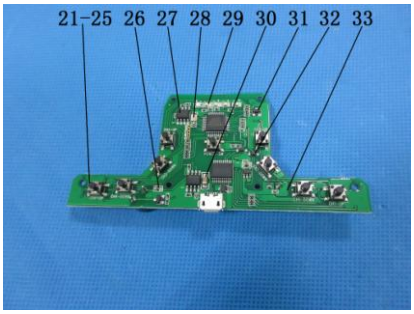
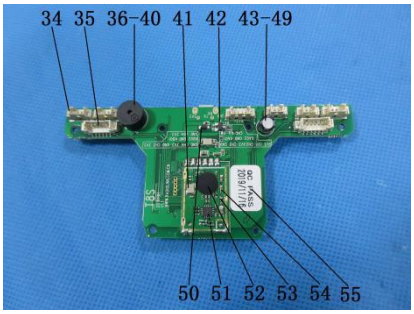
CNAS —Registration No.: CNAS L7924

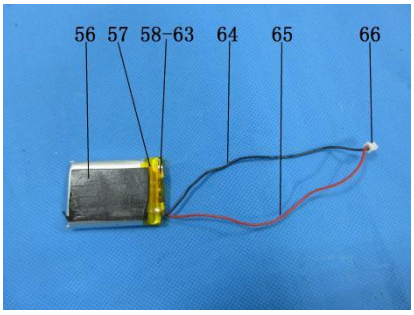
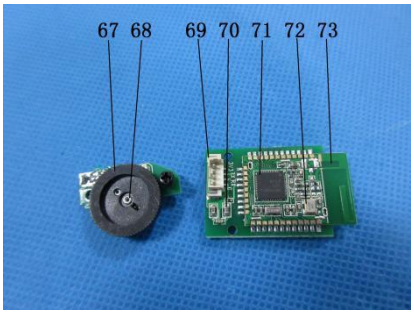
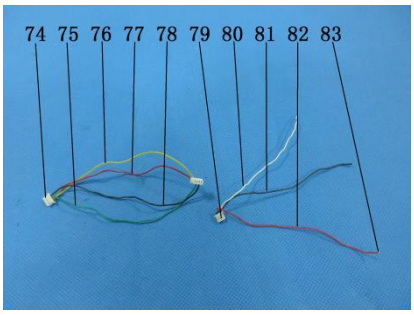
Signed for and on behalf of

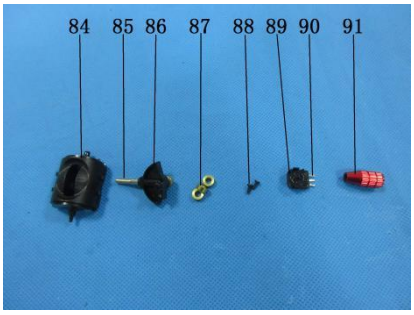
**********For further details, please refer to the following page(s)**********

Test Material List

Material No.	Description (Location)	Photo(s) of tested materials
1	Black plastic (case)	
2	Black label with white lettering	
3	Silver label with black lettering	
4	Black plastic (buttons)	
5	Silver sheet	
6	Metal (screw) with black coating	
7	Transparent plastic yarn	
8	Gold metal tube	
9	Gold wire	
10	Transparent plastic (lamp shade)	
11	Red plastic (socket)	
12	Silver metal (pin)	
13	Silver metal block	
14	Silver sheet	
15	Silver metal needle	
16	Black plastic (contact)	
17	Silver metal (spring)	
18	White plastic (terminal housing)	
19	Red plastic (cable)	
20	Black plastic (cable)	
21	Black plastic (buttons)	
22	Silver sheet	
23	Black plastic (base)	
24	Silver metal (patch)	
25	Silver metal (pin)	
26	Black body (resistor, PCB)	
27	Black body (IC, PCB)	

Material No.	Description (Location)	Photo(s) of tested materials
28	Silver metal body (crystal oscillator, PCB)	
29	White body (LED lamp)	
30	Brown body (capacitance, PCB)	
31	Black body (transistor, PCB)	
32	Black body (diode, PCB)	
33	Green PCB	
34	Beige plastic (terminal housing)	
35	Silver metal (pin)	
36	Black plastic case	
37	Silver metal (patch)	
38	White ceramic	
39	Silver metal (pin)	
40	Black rubber	
41	Silver metal body (crystal oscillator, PCB)	
42	Black body (transistor, PCB)	
43	Black plastic with white lettering (capacitor, PCB)	
44	Silver metal case (capacitor, PCB)	
45	Black rubber base (capacitor, PCB)	
46	Silver metal pin (capacitor, PCB)	
47	Silver platinum plate (capacitor, PCB)	
48	Dark silver platinum plate (capacitor, PCB)	
49	Yellow paper with liquid (capacitance, PCB)	
50	Black body (diode, PCB)	
51	Black body (IC, PCB)	
52	Black body (EC, PCB)	
53	Black body (resistor, PCB)	
54	Brown body (capacitance, PCB)	
55	White paper with black lettering	

Material No.	Description (Location)	Photo(s) of tested materials
56	Black foam gum	
57	Yellow tape	
58	Silver metal (electrode)	
59	Green PCB	
60	Black body (IC, PCB)	
61	Black body (resistor, PCB)	
62	Brown body (capacitance, PCB)	
63	Silver metal (solder)	
64	Black plastic (cable)	
65	Red plastic (cable)	
66	White plastic (terminal housing)	
67	Black plastic (roller)	
68	Silver metal shaft	
69	Beige plastic (terminal housing)	
70	Brown body (capacitance, PCB)	
71	Black body (IC, PCB)	
72	Silver metal body (crystal oscillator, PCB)	
73	Green PCB	
74	White plastic (terminal housing)	
75	Green plastic (cable)	
76	Yellow plastic (cable)	
77	Red plastic (cable)	
78	Black plastic (cable)	
79	Silver metal (pin)	
80	White plastic (cable)	
81	Black plastic (cable)	
82	Red plastic (cable)	
83	Silver metal (wire)	

Material No.	Description (Location)	Photo(s) of tested materials
84	Black plastic case	
85	Silver metal (screw)	
86	Black plastic (stand)	
87	Gold metal (nut)	
88	Metal (screw) with black coating	
89	Black plastic sheet	
90	Silver metal (pin)	
91	Red coated metal (joystick)	

Test Result(s):

(1)Lead (Pb), Cadmium(Cd), Mercury(Hg), Hexavalent Chromium(Cr(VI)), Polybrominated Biphenyls(PBBs) and Polybrominated DiphenylEthers(PBDEs)

Test Method: IEC62321-3-1: 2013, IEC62321-4: 2013+A1:2017, IEC62321-5: 2013, IEC62321-6: 2015,IEC 62321-7-1:2015, IEC 62321-7-2: 2017, analyzed by EDXRF &ICP-OES & GC-MS &UV-Vis.

No.	EDXRF Result (1)					Chemical Result (2) (mg/kg)	Remark(3)	Conclusion
	Pb	Cd	Hg	Cr	Br			
1	BL	BL	BL	BL	BL	—	—	PASS
2	BL	BL	BL	BL	BL	—	—	PASS
3	BL	BL	BL	BL	BL	—	—	PASS
4	BL	BL	BL	BL	BL	—	—	PASS
5	BL	BL	BL	BL	NA	—	—	PASS
6	BL	BL	BL	BL	NA	—	—	PASS
7	BL	BL	BL	BL	BL	—	—	PASS
8	BL	BL	BL	BL	NA	—	—	PASS
9	BL	BL	BL	BL	NA	—	—	PASS
10	BL	BL	BL	BL	BL	—	—	PASS
11	BL	BL	BL	BL	BL	—	—	PASS
12	BL	BL	BL	BL	NA	—	—	PASS
13	BL	BL	BL	BL	NA	—	—	PASS
14	BL	BL	BL	BL	NA	—	—	PASS

No.	EDXRF Result (1)					Chemical Result (2) (mg/kg)	Remark(3)	Conclusion
	Pb	Cd	Hg	Cr	Br			
15	BL	BL	BL	BL	NA	—	—	PASS
16	BL	BL	BL	BL	BL	—	—	PASS
17	BL	BL	BL	BL	NA	—	—	PASS
18	BL	BL	BL	BL	BL	—	—	PASS
19	BL	BL	BL	BL	BL	—	—	PASS
20	BL	BL	BL	BL	BL	—	—	PASS
21	BL	BL	BL	BL	BL	—	—	PASS
22	BL	BL	BL	BL	NA	—	—	PASS
23	BL	BL	BL	BL	BL	—	—	PASS
24	BL	BL	BL	BL	NA	—	—	PASS
25	BL	BL	BL	BL	NA	—	—	PASS
26	BL	BL	BL	BL	BL	—	—	PASS
27	BL	BL	BL	BL	BL	—	—	PASS
28	BL	BL	BL	BL	NA	—	—	PASS
29	BL	BL	BL	BL	BL	—	—	PASS
30	BL	BL	BL	BL	BL	—	—	PASS
31	BL	BL	BL	BL	BL	—	—	PASS
32	BL	BL	BL	BL	BL	—	—	PASS
33	BL	BL	BL	BL	BL	—	—	PASS
34	BL	BL	BL	BL	BL	—	—	PASS
35	BL	BL	BL	BL	NA	—	—	PASS
36	BL	BL	BL	BL	BL	—	—	PASS
37	BL	BL	BL	BL	NA	—	—	PASS
38	BL	BL	BL	BL	BL	—	—	PASS
39	BL	BL	BL	BL	NA	—	—	PASS
40	BL	BL	BL	BL	BL	—	—	PASS
41	BL	BL	BL	BL	NA	—	—	PASS
42	BL	BL	BL	BL	BL	—	—	PASS

No.	EDXRF Result (1)					Chemical Result (2) (mg/kg)	Remark(3)	Conclusion
	Pb	Cd	Hg	Cr	Br			
43	BL	BL	BL	BL	NA	—	—	PASS
44	BL	BL	BL	BL	BL	—	—	PASS
45	BL	BL	BL	BL	BL	—	—	PASS
46	BL	BL	BL	BL	NA	—	—	PASS
47	BL	BL	BL	BL	NA	—	—	PASS
48	BL	BL	BL	BL	NA	—	—	PASS
49	BL	BL	BL	BL	BL	—	—	PASS
50	BL	BL	BL	BL	BL	—	—	PASS
51	BL	BL	BL	BL	BL	—	—	PASS
52	BL	BL	BL	BL	BL	—	—	PASS
53	BL	BL	BL	BL	BL	—	—	PASS
54	BL	BL	BL	BL	BL	—	—	PASS
55	BL	BL	BL	BL	BL	—	—	PASS
56	BL	BL	BL	BL	BL	—	—	PASS
57	BL	BL	BL	BL	BL	—	—	PASS
58	BL	BL	BL	BL	NA	—	—	PASS
59	BL	BL	BL	BL	BL	—	—	PASS
60	BL	BL	BL	BL	BL	—	—	PASS
61	BL	BL	BL	BL	BL	—	—	PASS
62	BL	BL	BL	BL	BL	—	—	PASS
63	BL	BL	BL	BL	NA	—	—	PASS
64	BL	BL	BL	BL	BL	—	—	PASS
65	BL	BL	BL	BL	BL	—	—	PASS
66	BL	BL	BL	BL	BL	—	—	PASS
67	BL	BL	BL	BL	BL	—	—	PASS
68	BL	BL	BL	BL	NA	—	—	PASS
69	BL	BL	BL	BL	BL	—	—	PASS
70	BL	BL	BL	BL	BL	—	—	PASS

No.	EDXRF Result (1)					Chemical Result (2) (mg/kg)	Remark(3)	Conclusion
	Pb	Cd	Hg	Cr	Br			
71	BL	BL	BL	BL	BL	—	—	PASS
72	BL	BL	BL	BL	NA	—	—	PASS
73	BL	BL	BL	BL	BL	—	—	PASS
74	BL	BL	BL	BL	BL	—	—	PASS
75	BL	BL	BL	BL	BL	—	—	PASS
76	BL	BL	BL	BL	BL	—	—	PASS
77	BL	BL	BL	BL	BL	—	—	PASS
78	BL	BL	BL	BL	BL	—	—	PASS
79	BL	BL	BL	BL	NA	—	—	PASS
80	BL	BL	BL	BL	BL	—	—	PASS
81	BL	BL	BL	BL	BL	—	—	PASS
82	BL	BL	BL	BL	BL	—	—	PASS
83	BL	BL	BL	BL	NA	—	—	PASS
84	BL	BL	BL	BL	BL	—	—	PASS
85	BL	BL	BL	BL	BL	—	—	PASS
86	BL	BL	BL	BL	BL	—	—	PASS
87	OL	BL	BL	BL	NA	Pb: 17130#	Copper alloy	PASS
88	BL	BL	BL	BL	NA	—	—	PASS
89	BL	BL	BL	BL	BL	—	—	PASS
90	BL	BL	BL	BL	NA	—	—	PASS
91	BL	BL	BL	BL	NA	—	—	PASS

Remark:

(1) ①Results are obtained by EDXRF for primary screening, and further wet chemical testing by ICP-OES (for Cd, Pb, Hg), UV-VIS (for Cr(VI)) and GC/MS (for PBBs, PBDEs) is recommended to be performed, if an inconclusive result was found (as "X" in below table) (unit: mg/kg).

②OL = Over Limit, BL = Below Limit, X = Inconclusive, NA = Not Applicable.

③The EDXRF screening test for RoHS elements – The reading may be different to the actual content in the samplebe of non-uniformity composition.

Element	Polymer	Metal	Composite Materials
Cd	BL ≤(70-3σ)< X <(130+3σ)≤ OL	BL ≤(70-3σ)< X <(130+3σ)≤ OL	LOD < X <(150+3σ)≤ OL
Pb	BL ≤(700-3σ)< X <(1300+3σ)≤ OL	BL ≤(700-3σ)< X <(1300+3σ)≤ OL	BL ≤(500-3σ)< X <(1500+3σ)≤ OL
Hg	BL ≤(700-3σ)< X <(1300+3σ)≤ OL	BL ≤(700-3σ)< X <(1300+3σ)≤ OL	BL ≤(500-3σ)< X <(1500+3σ)≤ OL
Br	BL ≤ (300-3σ)< X	NA	BL ≤ (250-3σ)< X
Cr	BL ≤ (700-3σ)< X	BL ≤ (700-3σ)< X	BL ≤ (500-3σ)< X

Units and limits in EU RoHS Directive 2011/65/EU:

Element	Pb	Cd	Hg	Cr(VI)	PBBs(single)	PBDEs(single)
Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Limit	1000	100	1000	1000	1000	1000

(2) ① mg/kg = ppm = 0.0001%, N.D. = Not Detected (Less than RL).

②Unit and RL (Report limit) in wet chemical test.

Element	Pb	Cd	Hg	Cr(VI)	PBBs(single)	PBDEs(single)
Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
RL	2	2	2	2	5	5

③According to IEC 62321-7-1:2015, result on Cr(VI)for metal sample is shown as Positive/Negative.
Negative = Absence of Cr(VI) coating, Positive = Presence of Cr(VI) coating.
Storage condition and production date of the tested sample are unavailable and thus results of Cr(VI) represent status of the sample at the time of testing.

④ According to IEC 62321-3-1:2013, this column represents the results of wet chem test.

(3)This column represents the exempted decoration of material or other related testing sample's information.
According to the declaration from the client, Lead in specimen(s) is exempted by EU RoHS Directive 2011/65/EU and its amendment Directive EU 2015/863 base on:

Copper alloy containing up to 4 % lead by weight.

(2) Phthalates (DBP, BBP, DEHP, DIBP) content

Test Method: IEC 62321-8: 2017, analyzed by gas chromatographic-mass spectrometer (GC-MS).

Substances	DBP	BBP	DEHP	DIBP	Conclusion
CAS No.	84-74-2	85-68-7	117-81-7	84-69-5	
Limit (mg/kg)	1000	1000	1000	1000	
RL (mg/kg)	30	30	30	30	
Material No.	Result (mg/kg)				
1	N.D.	N.D.	N.D.	N.D.	PASS
2	N.D.	N.D.	N.D.	N.D.	PASS
3	N.D.	N.D.	N.D.	N.D.	PASS
4	N.D.	N.D.	N.D.	N.D.	PASS
7	N.D.	N.D.	N.D.	N.D.	PASS
10	N.D.	N.D.	N.D.	N.D.	PASS
11	N.D.	N.D.	N.D.	N.D.	PASS
16	N.D.	N.D.	N.D.	N.D.	PASS
18	N.D.	N.D.	N.D.	N.D.	PASS
19	N.D.	N.D.	125	N.D.	PASS
20	N.D.	N.D.	128	N.D.	PASS
21	N.D.	N.D.	N.D.	N.D.	PASS
23	N.D.	N.D.	N.D.	N.D.	PASS
26	N.D.	N.D.	N.D.	N.D.	PASS
27	N.D.	N.D.	N.D.	N.D.	PASS
29	N.D.	N.D.	N.D.	N.D.	PASS
30	N.D.	N.D.	N.D.	N.D.	PASS
31	N.D.	N.D.	N.D.	N.D.	PASS
32	N.D.	N.D.	N.D.	N.D.	PASS

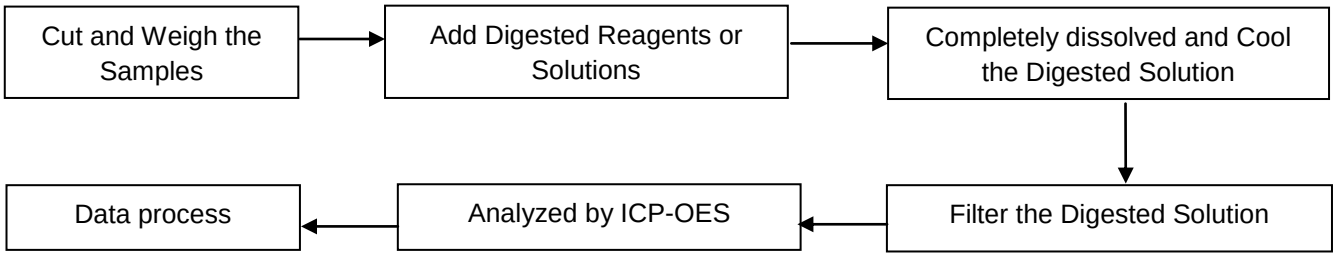
Substances	DBP	BBP	DEHP	DIBP	Conclusion
CAS No.	84-74-2	85-68-7	117-81-7	84-69-5	
Limit (mg/kg)	1000	1000	1000	1000	
RL (mg/kg)	30	30	30	30	
Material No.	Result (mg/kg)				
33	N.D.	N.D.	N.D.	N.D.	PASS
34	N.D.	N.D.	N.D.	N.D.	PASS
36	N.D.	N.D.	N.D.	N.D.	PASS
38	N.D.	N.D.	N.D.	N.D.	PASS
40	N.D.	N.D.	N.D.	N.D.	PASS
42	N.D.	N.D.	N.D.	N.D.	PASS
44	N.D.	N.D.	N.D.	N.D.	PASS
45	N.D.	N.D.	N.D.	N.D.	PASS
49	N.D.	N.D.	N.D.	N.D.	PASS
50	N.D.	N.D.	N.D.	N.D.	PASS
51	N.D.	N.D.	N.D.	N.D.	PASS
52	N.D.	N.D.	N.D.	N.D.	PASS
53	N.D.	N.D.	N.D.	N.D.	PASS
54	N.D.	N.D.	N.D.	N.D.	PASS
55	N.D.	N.D.	N.D.	N.D.	PASS
56	N.D.	N.D.	N.D.	N.D.	PASS
57	N.D.	N.D.	N.D.	N.D.	PASS
59	N.D.	N.D.	N.D.	N.D.	PASS
60	N.D.	N.D.	N.D.	N.D.	PASS
61	N.D.	N.D.	N.D.	N.D.	PASS
62	N.D.	N.D.	N.D.	N.D.	PASS
64	N.D.	N.D.	N.D.	N.D.	PASS
65	N.D.	N.D.	N.D.	N.D.	PASS
66	N.D.	N.D.	N.D.	N.D.	PASS
67	N.D.	N.D.	N.D.	N.D.	PASS

Substances	DBP	BBP	DEHP	DIBP	Conclusion
CAS No.	84-74-2	85-68-7	117-81-7	84-69-5	
Limit (mg/kg)	1000	1000	1000	1000	
RL (mg/kg)	30	30	30	30	
Material No.	Result (mg/kg)				
69	N.D.	N.D.	N.D.	N.D.	PASS
70	N.D.	N.D.	N.D.	N.D.	PASS
71	N.D.	N.D.	N.D.	N.D.	PASS
73	N.D.	N.D.	N.D.	N.D.	PASS
74	N.D.	N.D.	N.D.	N.D.	PASS
75	N.D.	N.D.	N.D.	N.D.	PASS
76	N.D.	N.D.	N.D.	N.D.	PASS
77	N.D.	N.D.	N.D.	N.D.	PASS
78	N.D.	N.D.	N.D.	N.D.	PASS
80	N.D.	N.D.	N.D.	N.D.	PASS
81	N.D.	N.D.	N.D.	N.D.	PASS
82	N.D.	N.D.	N.D.	N.D.	PASS
84	N.D.	N.D.	N.D.	N.D.	PASS
86	N.D.	N.D.	N.D.	N.D.	PASS
89	N.D.	N.D.	N.D.	N.D.	PASS

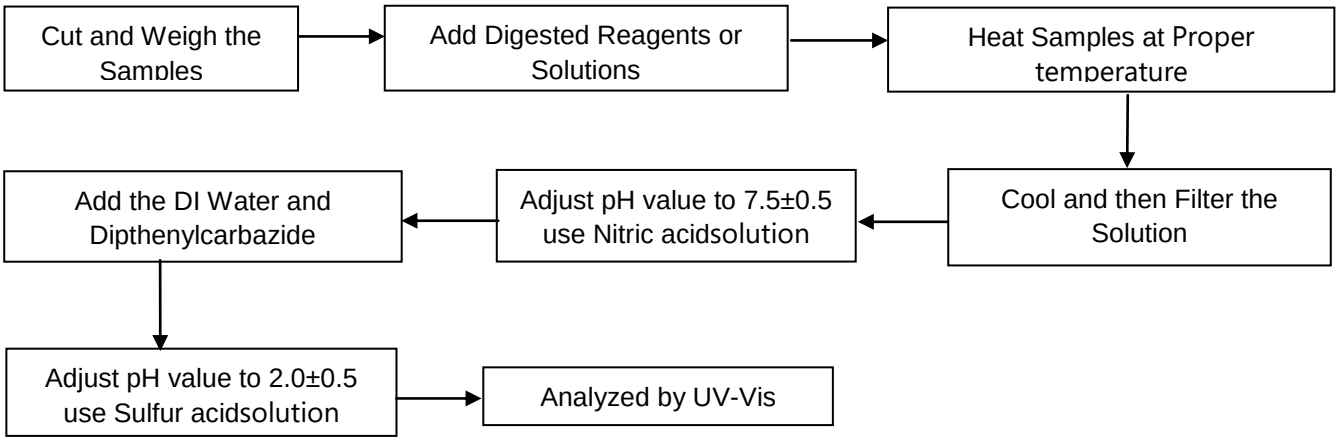
Note:
1. mg/kg = milligram per kilogram (ppm).
2. RL = report limit.
3. N.D.=not detected(less than RL).

Test Process Flow

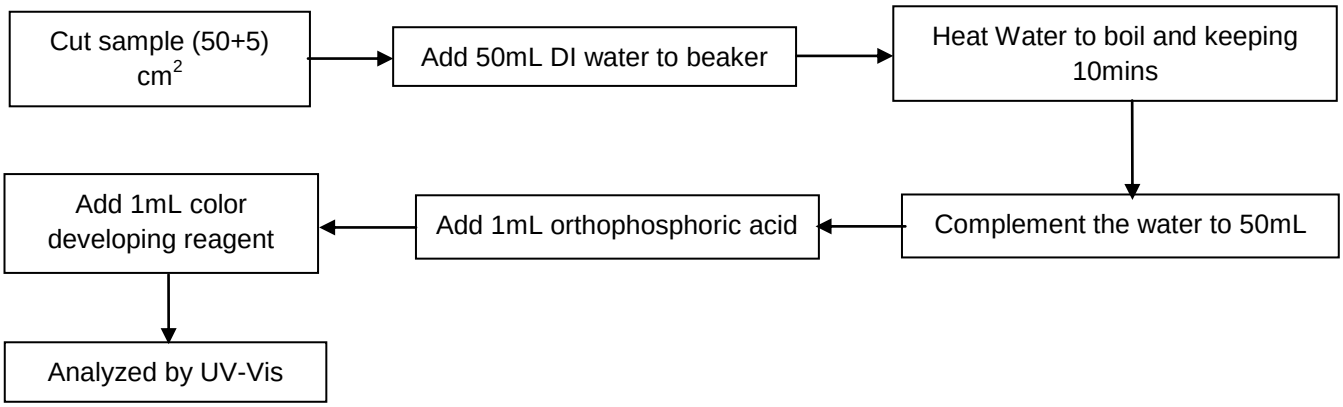
1. Lead, Cadmium, Mercury



2. Hexavalent Chromium (Non-metal)

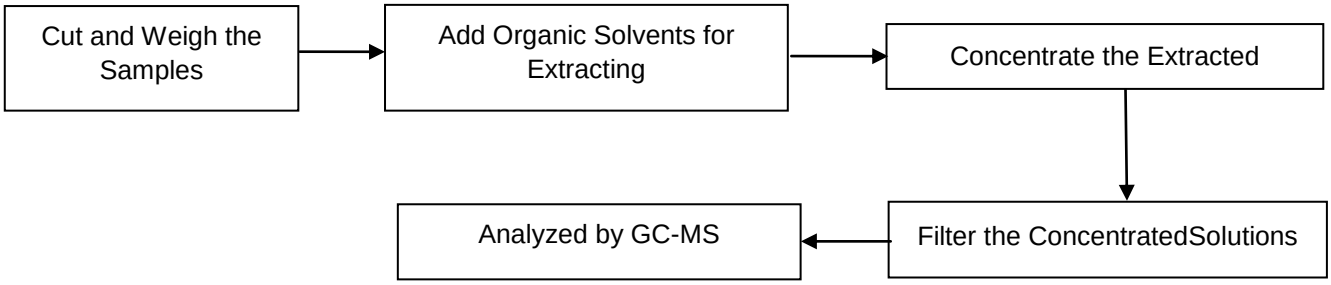


Hexavalent Chromium (Metal)



Test Process Flow (Continued):

3. PBBs & PBDEs, Phthalates



Photo(s) of Sample:

End of Report