TEST REPORT

Company Name Shown on Report:	Hunter Douglas Europe B.V.
Address:	Blaak 555,3011 GB Rotterdam, The Netherlands

The following sample(s) was/were submitted and identified on behalf of the client as:

Sample Name:	DC Motor
Sample Model:	M22T-G2, ID: 17.0906.0000/17.0950.0000
Manufacturer:	Shenzhen BOFU Smart Co., Ltd
Address:	7 floor, No. 92, Tuopu Industrial Zone, Lingxia Road, Bao'an District, Shenzhen
Sample quantity:	3 pieces
Sample Received Date:	Aug.05, 2024
Test Period:	Aug.05, 2024 – Aug.19, 2024
Date of Issue:	Aug.23, 2024

ISSUED BY:

GUANGDONG TI COBO TESTING CO.,LTD.

Tested by: Jason **Checked by:** Lily **Approved by:** Sam Xie

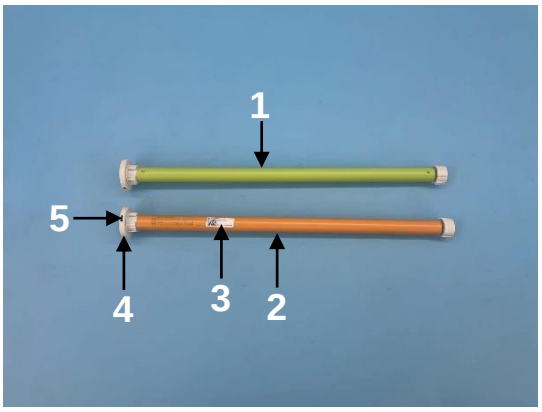
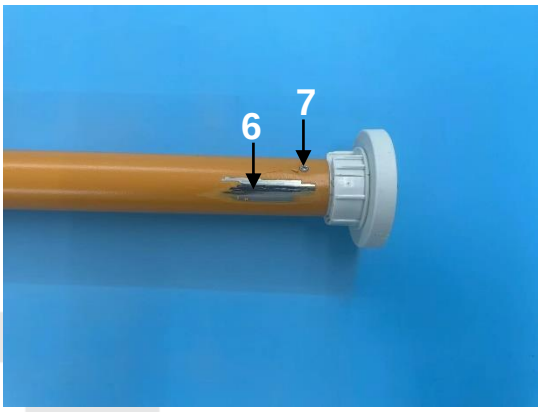
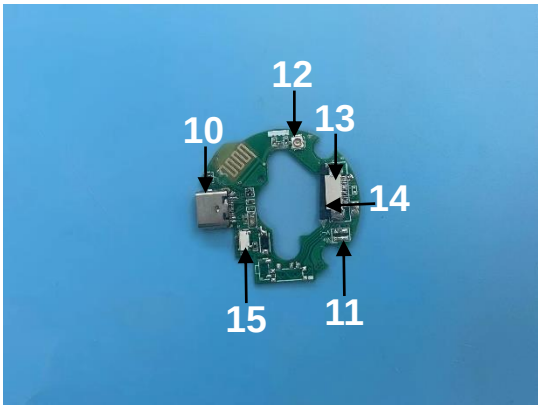
Anti-counterfeiting code: zkqr

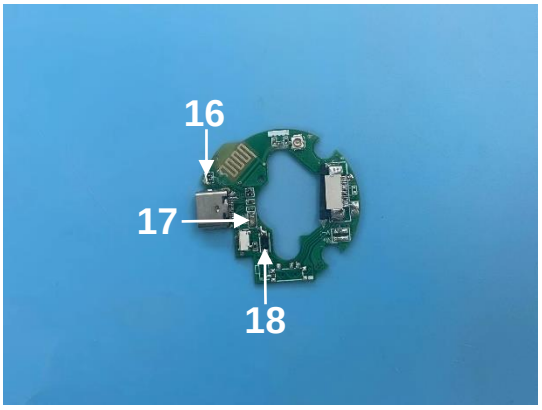
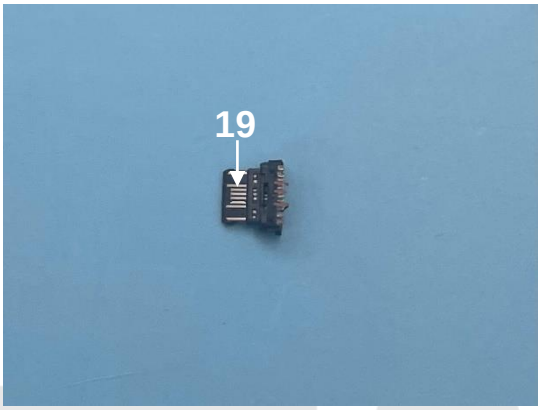
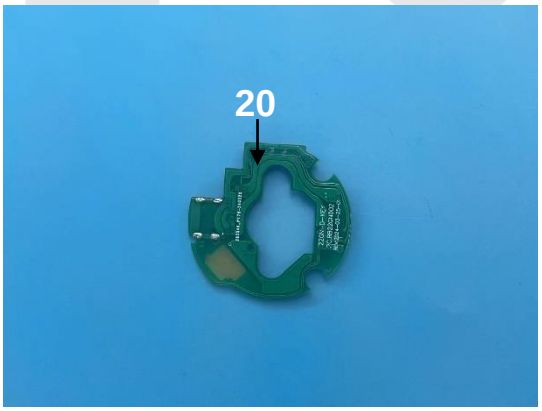
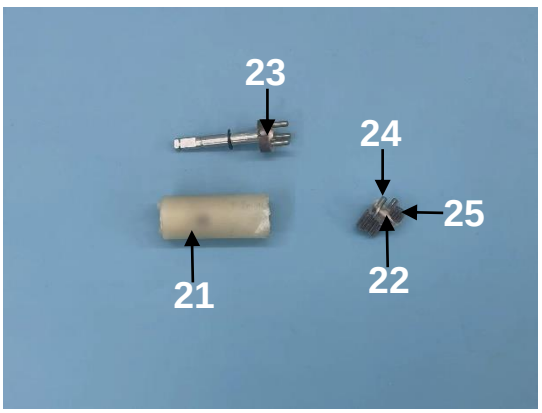
1. Test Requested and Test Conclusion:

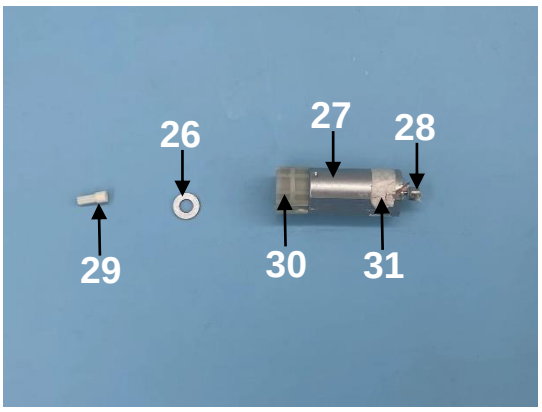
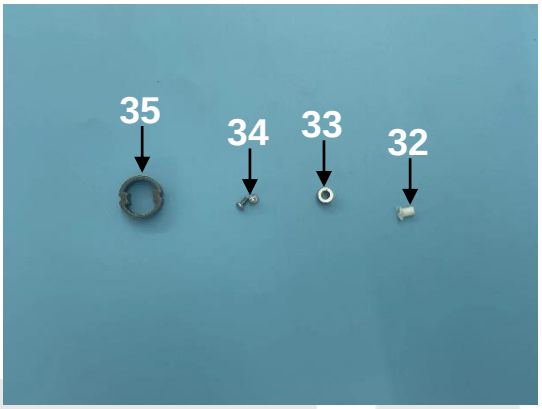
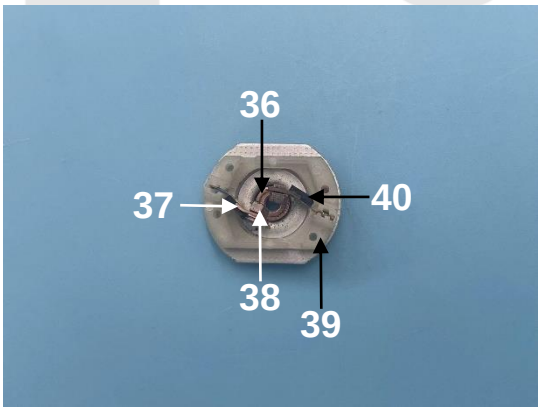
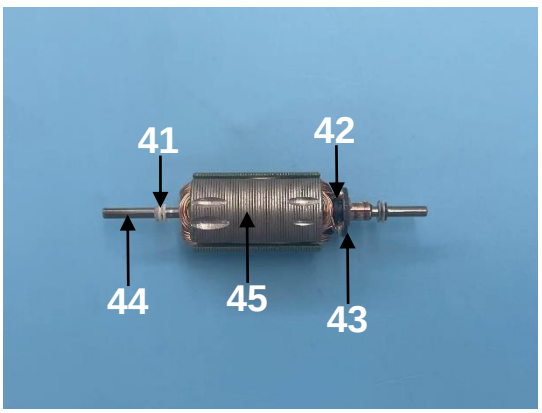
Based on the performed tests on specified material(s) or submitted sample(s).

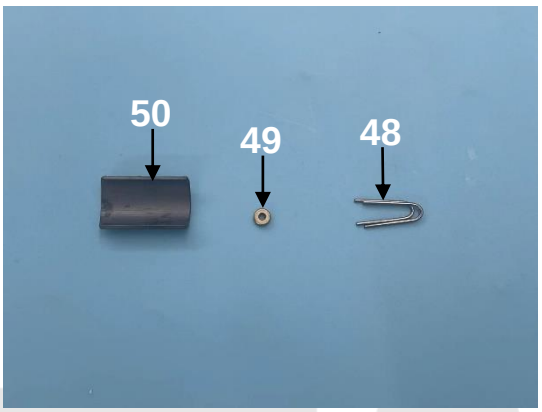
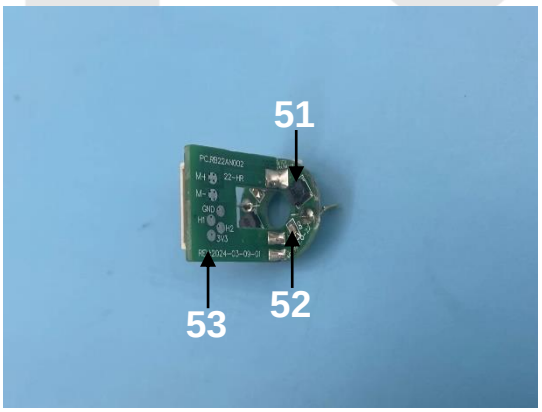
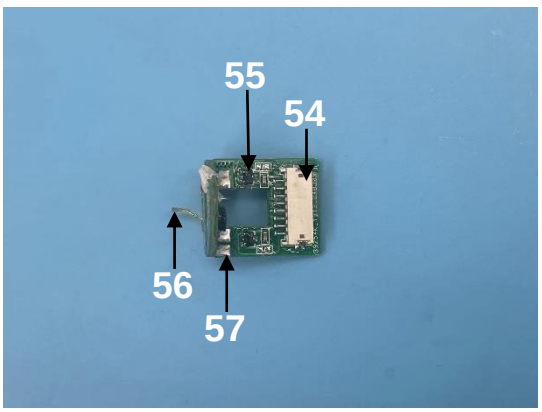
Test items	Conclusion
RoHS Directive 2011/65/EU Revised instructions (EU) 2015/863 of the European parliament and of the council on the restriction of the use of certain hazardous substances in electrical and electronic equipment	
- Lead (Pb)/ Cadmium(Cd)/ Mercury(Hg)/ Hexavalent Chromium(Cr^{6+}) content.	PASS
- Polybrominated biphenyls (PBBs) &Polybrominated diphenyl ethers (PBDEs) content.	PASS
- Dibutyl phthalate (DBP), Benzylbutyl phthalate (BBP), Di-(2-ethylhexyl) phthalate (DEHP), Diisobutyl phthalate(DIBP) content	PASS

2. Sample description and sample photo list:

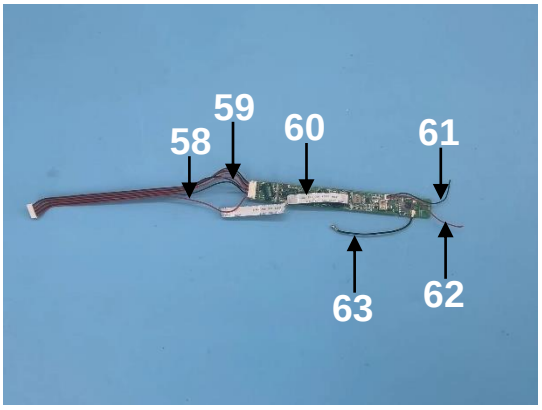
Sample No.	Description	Sample photo
1	Green coating	
2	Orange coating	
3	White sticker with black printing	
4	Beige plastic	
5	Black plastic	
6	Silvery metal	
7	Silvery metal	
8	Silvery metal	
9	Silvery metal with black plating	
10	Silvery metal	
11	Soldering tin	
12	White plastic	
13	Beige plastic	
14	Black plastic	
15	Beige plastic	

16	White plastic	
17	Brown capacitor	
18	Black crystal	
19	Silvery metal	
20	PCB	
21	Beige plastic	
22	White oil	
23	Silvery metal	
24	Silvery metal	
25	Silvery metal	

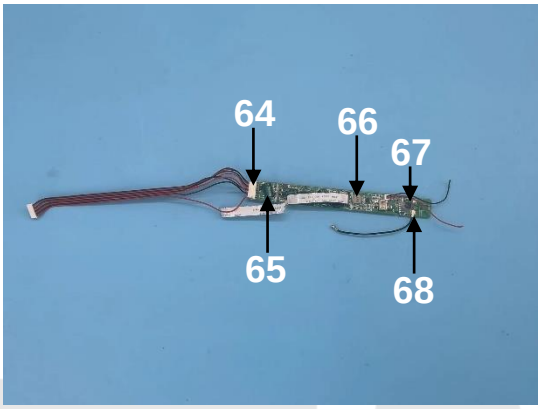
26	Silvery metal	
27	Silvery metal	
28	Silvery magnet	
29	White plastic	
30	Beige plastic	
31	White paper	
32	White plastic	
33	Silvery magnet	
34	Silvery metal	
35	Silvery metal	
36	Copper metal	
37	Copper metal	
38	Brown ceramics	
39	Beige plastic	
40	Black plastic	
41	White plastic	
42	Black plastic	
43	Black ceramics	
44	Silvery metal	
45	Silvery metal	

46	Copper metal	
47	Copper metal	
48	Silvery metal	
49	Golden metal	
50	Black magnet	
51	Black ceramics	
52	Brown capacitor	
53	PCB	
54	Beige plastic	
55	Black crystal	
56	Golden metal	
57	Soldering tin	

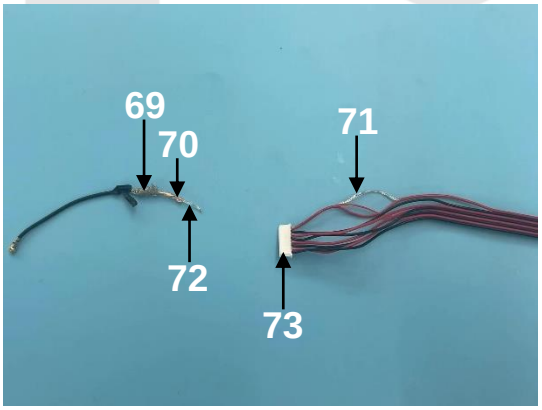
58	Red soft plastic
59	Black soft plastic
60	White plastic
61	Black soft plastic
62	Red soft plastic
63	Black soft plastic



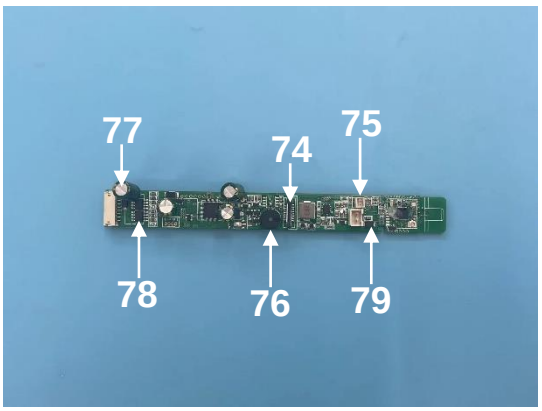
64	Beige plastic
65	Green plastic
66	Gray ceramics
67	Black crystal
68	Golden metal

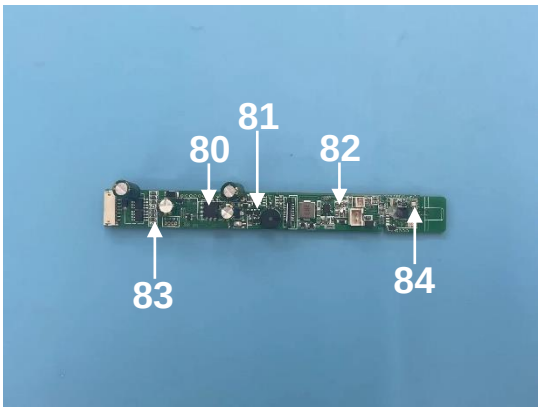
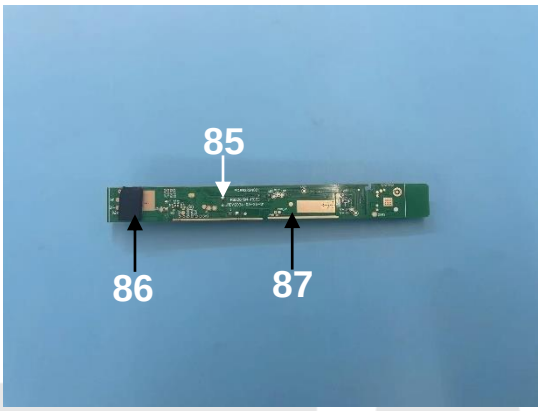
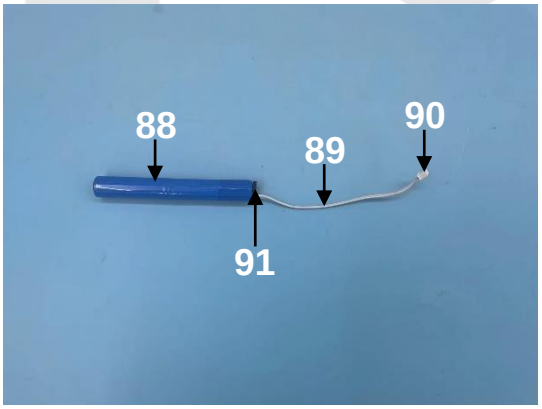
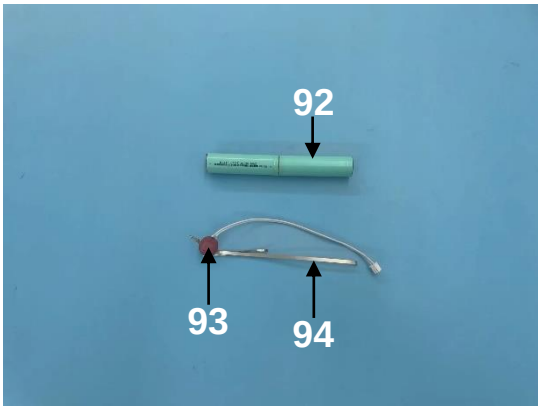


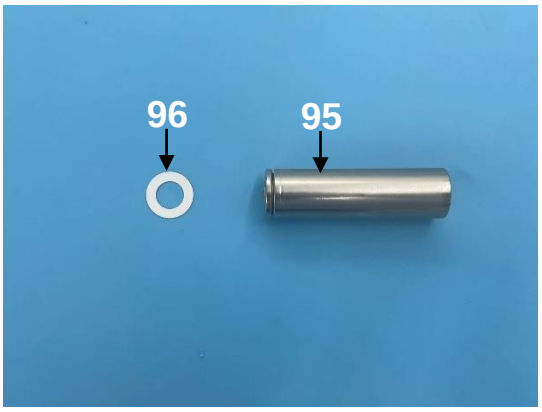
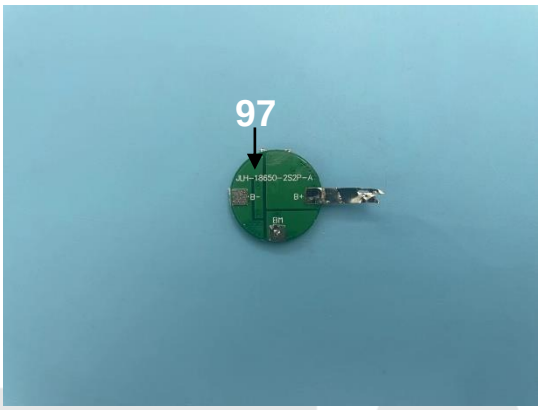
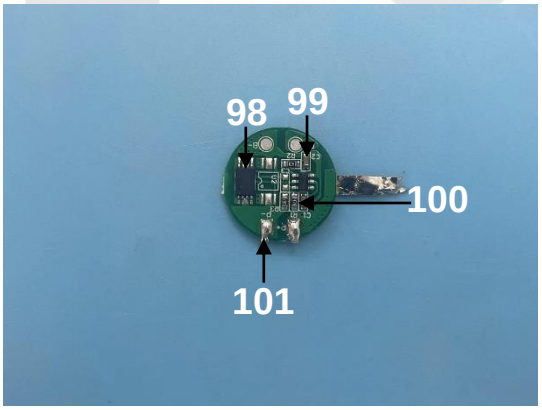
69	Silvery metal
70	Copper metal foil
71	Silvery metal
72	Transparent soft plastic
73	White plastic



74	Black plastic
75	Beige plastic
76	Black plastic
77	Silvery capacitor
78	Black crystal
79	Black crystal



80	Black crystal	
81	Black crystal	
82	Brown capacitor	
83	Black resistor	
84	Silvery metal	
85	Soldering tin	
86	Black foam	
87	PCB	
88	Blue plastic	
89	White soft plastic	
90	White plastic	
91	Black foam	
92	Green plastic	
93	Red paper	
94	Silvery metal	

95	Silvery metal	
96	White plastic	
97	PCB	
98	Black crystal	
99	Brown capacitor	
100	Black resistor	
101	Soldering tin	

3. Test Result(s)

3.1 Screening Test

Test Method: With reference to IEC 62321-3-1:2013, Screening –Lead (Pb)/ Cadmium(Cd)/ Mercury(Hg)/ Total Chromium(Cr)/ Total Bromine by X-ray fluorescence spectrometry.

Test Item	Total Chromium (Cr)	Cadmium (Cd)	Total Bromine (Br)	Mercury (Hg)	Lead (Pb)
Screening Limit	200mg/kg	50mg/kg	200mg/kg	200mg/kg	200mg/kg
Material No.	XRF Result				
1	BL	BL	BL	BL	BL
2	BL	BL	BL	BL	BL
3	BL	BL	BL	BL	BL
4	BL	BL	BL	BL	BL
5	BL	BL	BL	BL	BL
6	101455[a]	BL	NA	BL	BL
7	970[a]	BL	NA	BL	BL
8	BL	BL	NA	BL	BL
9	226[a]	BL	NA	BL	481[a]
10	87651[a]	BL	NA	BL	BL
11	BL	BL	NA	BL	BL
12	BL	BL	BL	BL	BL
13	BL	BL	BL	BL	BL
14	BL	BL	BL	BL	BL
15	BL	BL	BL	BL	BL
16	BL	BL	BL	BL	BL
17	BL	BL	BL	BL	BL
18	BL	BL	BL	BL	BL
19	BL	BL	NA	BL	BL
20	BL	BL	9995[a]	BL	BL
21	BL	BL	BL	BL	BL
22	BL	BL	BL	BL	BL
23	BL	BL	NA	BL	BL
24	14290[a]	BL	NA	BL	BL
25	551[a]	BL	NA	BL	BL
26	407[a]	BL	NA	BL	BL
27	BL	BL	NA	BL	BL
28	BL	224[a]	NA	BL	BL
29	BL	BL	BL	BL	BL
30	BL	BL	BL	BL	BL
31	BL	BL	BL	BL	BL

32	BL	BL	BL	BL	BL
33	BL	BL	NA	BL	BL
34	BL	136[a]	NA	BL	661[a]
35	255[a]	BL	NA	BL	BL
36	BL	BL	NA	BL	BL
37	BL	BL	NA	BL	355[a]
38	BL	BL	BL	BL	BL
39	BL	BL	BL	BL	BL
40	BL	BL	BL	BL	BL
41	BL	BL	BL	BL	BL
42	BL	BL	BL	BL	BL
43	BL	BL	BL	BL	BL
44	80097[a]	317[a]	NA	BL	576[a]
45	2440[a]	BL	NA	BL	BL
46	BL	BL	NA	BL	BL
47	BL	99[a]	NA	BL	BL
48	291[a]	259[a]	NA	BL	BL
49	BL	BL	NA	BL	927[a]
50	BL	BL	BL	BL	BL
51	BL	BL	BL	BL	BL
52	BL	BL	BL	BL	BL
53	BL	BL	9877[a]	BL	BL
54	BL	BL	BL	BL	BL
55	BL	BL	BL	BL	BL
56	BL	BL	NA	BL	500[a]
57	BL	BL	NA	BL	BL
58	BL	BL	BL	BL	BL
59	BL	BL	BL	BL	BL
60	BL	BL	BL	BL	BL
61	BL	BL	BL	BL	BL
62	BL	BL	BL	BL	BL
63	BL	BL	BL	BL	BL
64	BL	BL	BL	BL	BL
65	BL	BL	BL	BL	BL
66	BL	BL	BL	BL	BL
67	BL	BL	BL	BL	BL
68	BL	BL	NA	BL	BL
69	BL	BL	NA	BL	BL
70	BL	134[a]	NA	BL	215[a]

71	BL	BL	NA	BL	BL
72	BL	BL	BL	BL	BL
73	BL	BL	BL	BL	BL
74	BL	BL	BL	BL	BL
75	BL	BL	BL	BL	BL
76	BL	BL	BL	BL	BL
77	BL	BL	BL	BL	BL
78	BL	BL	BL	BL	BL
79	BL	BL	BL	BL	BL
80	BL	BL	BL	BL	BL
81	BL	BL	BL	BL	BL
82	BL	BL	BL	BL	BL
83	BL	BL	BL	BL	BL
84	BL	BL	NA	BL	BL
85	BL	BL	NA	BL	BL
86	BL	BL	BL	BL	BL
87	BL	BL	18462[a]	BL	BL
88	BL	BL	BL	BL	BL
89	BL	BL	BL	BL	BL
90	BL	BL	BL	BL	BL
91	BL	BL	BL	BL	BL
92	BL	BL	BL	BL	BL
93	BL	BL	BL	BL	BL
94	BL	BL	NA	BL	BL
95	BL	BL	NA	BL	BL
96	BL	BL	BL	BL	BL
97	BL	BL	2791[a]	BL	BL
98	BL	BL	BL	BL	BL
99	BL	BL	BL	BL	BL
100	BL	BL	BL	BL	BL
101	BL	BL	NA	BL	BL

Note:
1. mg/kg = milligram per kilogram.
2. “BL” = Below Screening Limit.
3. “NA” = Not Applicable.
4. “a” denotes further confirmation test was conducted, results are listed in 3.2 and 3.3.

3.2 Heavy Metal Content

Test Method:

Lead (Pb)/Cadmium(Cd): IEC 62321-5:2013, analysis was performed by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES).

Mercury(Hg): IEC 62321-4:2013+AMD1:2017, analysis was performed by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES).

Hexavalent Chromium(Cr^{6+}): metal: IEC 62321-7-1:2015,nonmetal:IEC 62321-7-2:2017, analysis was performed by Ultraviolet–visible spectroscopy (UV-Vis).

Test Item	Hexavalent Chromium (Cr^{6+})	Hexavalent Chromium (Cr^{6+})	Cadmium (Cd)	Mercury (Hg)	Lead (Pb)
Limit	**1000 mg/kg**	**Negative**	**100 mg/kg**	**1000 mg/kg**	**1000 mg/kg**
Material No.	**Result**				
6	NA	Negative	--	--	--
7	NA	Negative	--	--	--
9	NA	Negative	--	--	N.D.
10	NA	Negative	--	--	--
24	NA	Negative	--	--	--
25	NA	Negative	--	--	--
26	NA	Negative	--	--	--
28	--	--	N.D.	--	--
34	--	--	N.D.	--	N.D.
35	NA	Negative	--	--	--
37	--	--	--	--	N.D.
44	NA	Negative	N.D.	--	N.D.
45	NA	Negative	--	--	--
47	--	--	N.D.	--	--
48	NA	Negative	N.D.	--	--
49	--	--	--	--	N.D.
56	--	--	--	--	N.D.
70	--	--	N.D.	--	N.D.

Note:
1. RL (Report Limit) = Pb, Cd, Hg: 10mg/kg;Cr^{6+}: nonmetal -10mg/kg, metal- Negative(<0.1μg/cm^2).
2. mg/kg = milligram per kilogram, μg/cm^2= micrograms per square centimeter.
3. N.D. = Not Detected (< RL).
4. NA = Not Applicable.
5. Negative = Surface of metal sample absence of Cr^{6+}, Positive = Surface of metal sample presence of Cr^{6+}.
6. "--" denotes tested by XRF, result is listed in 3.1.

Remark: (#1)=Exceeded upper screening limit, but if sample is Steel for machining purposes or galvanized steel, Aluminium or Copper alloy, the limit for Lead is 3,500mg/kg,4,000 mg/kg and 4,000 mg/kg respectively and further chemical test was suggested.

(#2)=Exceeded upper screening limit, as claimed by the declaration submitted from the applicant/supplier of applicant,/but if Lead comes from the constituent of ceramic of the electronic component(other than dielectric ceramic in capacitors) only .According to EU RoHS Directive(2011/65/EU),Lead in ceramic of this component can be exempted.

(#3)=Exceeded upper screening limit, as claimed by the declaration submitted from the applicant/supplier of applicant,/ but if Lead comes from the constituent of glass used in cathode ray tube/ in electrical and electronic component only. According to EU RoHS Directive (2011/65/EU), Lead in glass of this component can be exempted.

(#4)=As claimed by the declaration submitted from the applicant / supplier of applicant, the Lead content of the component comes from Copper alloy only. According to EU RoHS Directive (2011/65/EU), Lead in Copper alloy containing up to 4% (40,000 mg/kg) Lead by weight can be exempted.

(#5)=As claimed by the declaration submitted from the applicant / supplier of applicant, the Lead content of the component comes from steel for machining purposes / galvanized steel only. According to EU RoHS Directive (2011/65/EU), Lead as an alloying element in steel for machining purposes and in galvanized steel containing up to 0.35%(3,500 mg/kg) Lead by weight can be exempted.

(#6)=As claimed by the declaration submitted from the applicant / supplier of applicant, the Lead content of the component comes from the constituent of glass used in fluorescent tubes only. According to EU RoHS Directive(2011/65/EU),Lead in glass of fluorescent tubes can not be exceeding 0.2%(2,000 mg/kg) by weight.

(#7)=As claimed by the declaration submitted from the applicant / supplier of applicant, the Lead content of the component comes from the constituent of high melting temperature type solders (i.e. Lead-based alloys containing 85% by weight or more Lead) only. According to EU RoHS Directive(2011/65/EU), Lead in high melting temperature type solders of the component can be exempted.

3.3 Polybrominated biphenyls (PBBs) & Polybrominated diphenyl ethers (PBDEs) Content

Test Method: IEC 62321-6:2015, analysis was performed by Gas Chromatograph-Mass Spectrometer (GC-MS).

Test Item		Limit (mg/kg)	RL (mg/kg)	Result(mg/kg)			
				20	53	87	97
PBBs	Monobromobiphenyl	--	5	N.D.	N.D.	N.D.	N.D.
	Dibromobiphenyl	--	5	N.D.	N.D.	N.D.	N.D.
	Tribromobiphenyl	--	5	N.D.	N.D.	N.D.	N.D.
	Tetrabromobiphenyl	--	5	N.D.	N.D.	N.D.	N.D.
	Pentabromobiphenyl	--	5	N.D.	N.D.	N.D.	N.D.
	Hexabromobiphenyl	--	5	N.D.	N.D.	N.D.	N.D.
	Heptabromobiphenyl	--	5	N.D.	N.D.	N.D.	N.D.
	Octabromobiphenyl	--	5	N.D.	N.D.	N.D.	N.D.
	Nonabromobiphenyl	--	5	N.D.	N.D.	N.D.	N.D.
	Decabromobiphenyl	--	5	N.D.	N.D.	N.D.	N.D.
	Sum of detected PBBs	1000	--	N.D.	N.D.	N.D.	N.D.
PBDEs	Monobromodiphenylether	--	5	N.D.	N.D.	N.D.	N.D.
	Dibromodiphenylether	--	5	N.D.	N.D.	N.D.	N.D.
	Tribromodiphenylether	--	5	N.D.	N.D.	N.D.	N.D.
	Tetrabromodiphenylether	--	5	N.D.	N.D.	N.D.	N.D.
	Pentabromodiphenylether	--	5	N.D.	N.D.	N.D.	N.D.
	Hexabromodiphenylether	--	5	N.D.	N.D.	N.D.	N.D.
	Heptabromodiphenylether	--	5	N.D.	N.D.	N.D.	N.D.
	Octabromodiphenylether	--	5	N.D.	N.D.	N.D.	N.D.
	Nonabromodiphenylether	--	5	N.D.	N.D.	N.D.	N.D.
	Decabromodiphenylether	--	5	N.D.	N.D.	N.D.	N.D.
	Sum of detected PBDEs	1000	--	N.D.	N.D.	N.D.	N.D.

Note:
1. mg/kg = milligram per kilogram.
2. RL = Report Limit
3. N.D. = Not Detected (< RL).
4. "--" = Not Applicable.

3.4 Phthalates Content

Test Method: IEC 62321-8:2017, analysis was performed by Gas Chromatograph-Mass Spectrometer (GC-MS).

Test Item	Di-(2-ethylhexyl) phthalate (DEHP)	Dibutyl phthalate (DBP)	Benzylbutyl phthalate (BBP)	Diisobutyl phthalate(DIBP)
CAS No.	117-81-7	84-74-2	85-68-7	84-69-5
Limit	1000 mg/kg	1000 mg/kg	1000 mg/kg	1000 mg/kg
Material No.	Result (mg/kg)			
1	N.D.	N.D.	N.D.	N.D.
2	N.D.	N.D.	N.D.	N.D.
3	N.D.	N.D.	N.D.	N.D.
4	N.D.	N.D.	N.D.	N.D.
5	N.D.	N.D.	N.D.	N.D.
12	N.D.	N.D.	N.D.	N.D.
13	N.D.	N.D.	N.D.	N.D.
14	N.D.	N.D.	N.D.	N.D.
15	N.D.	N.D.	N.D.	N.D.
16	N.D.	N.D.	N.D.	N.D.
20	N.D.	N.D.	N.D.	N.D.
21	N.D.	N.D.	N.D.	N.D.
22	N.D.	N.D.	N.D.	N.D.
29	N.D.	N.D.	N.D.	N.D.
30	N.D.	N.D.	N.D.	N.D.
31	N.D.	N.D.	N.D.	N.D.
32	N.D.	N.D.	N.D.	N.D.
39	N.D.	N.D.	N.D.	N.D.
40	N.D.	N.D.	N.D.	N.D.
41	N.D.	N.D.	N.D.	N.D.
42	N.D.	N.D.	N.D.	N.D.
53	N.D.	N.D.	N.D.	N.D.
54	N.D.	N.D.	N.D.	N.D.
58	N.D.	N.D.	N.D.	N.D.
59	N.D.	N.D.	N.D.	N.D.
60	N.D.	N.D.	N.D.	N.D.
61	N.D.	N.D.	N.D.	N.D.
62	N.D.	N.D.	N.D.	N.D.

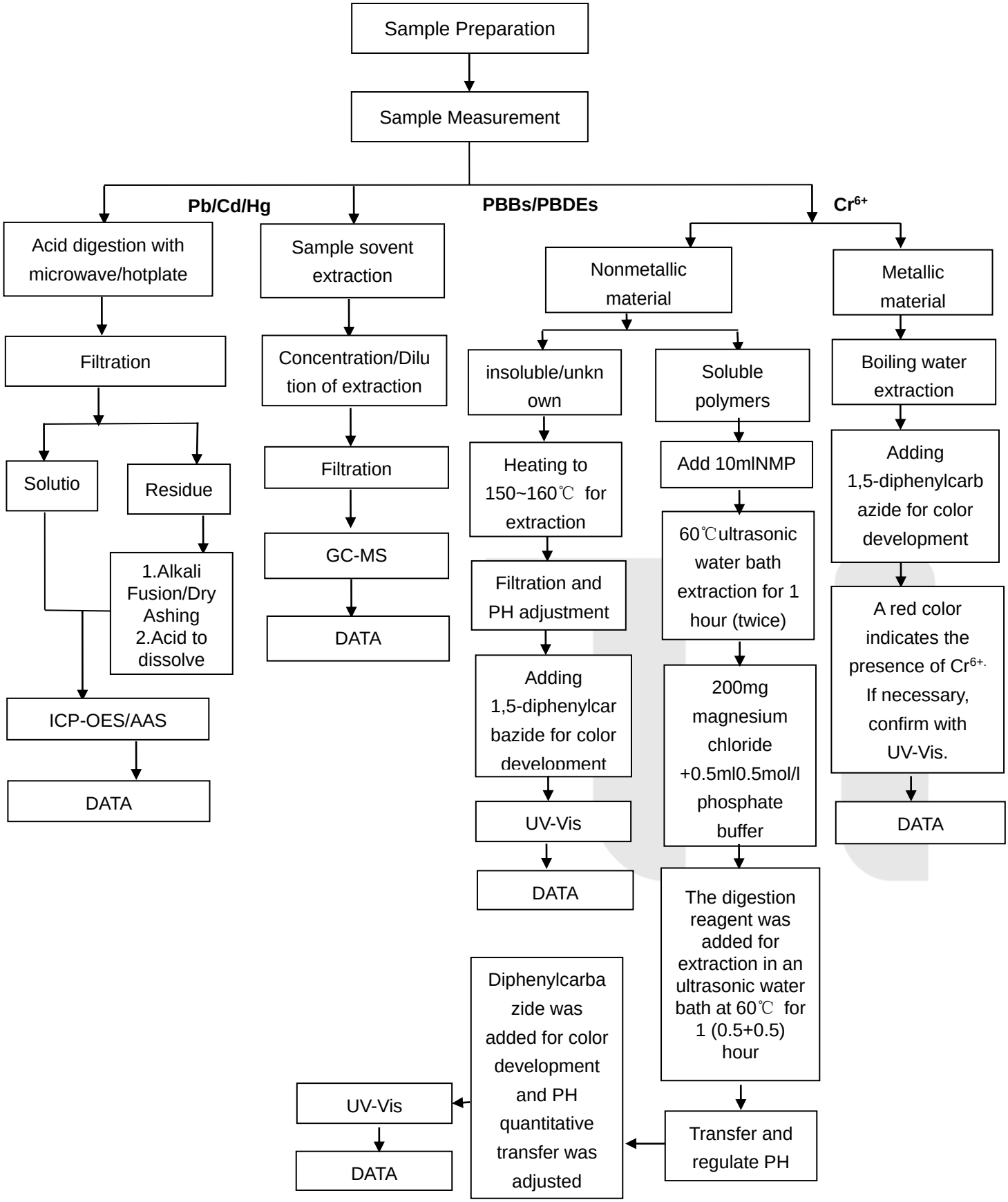
63	N.D.	N.D.	N.D.	N.D.
64	N.D.	N.D.	N.D.	N.D.
65	N.D.	N.D.	N.D.	N.D.
72	N.D.	N.D.	N.D.	N.D.
73	N.D.	N.D.	N.D.	N.D.
74	N.D.	N.D.	N.D.	N.D.
75	N.D.	N.D.	N.D.	N.D.
76	N.D.	N.D.	N.D.	N.D.
86	N.D.	N.D.	N.D.	N.D.
87	N.D.	N.D.	N.D.	N.D.
88	N.D.	N.D.	N.D.	N.D.
89	N.D.	N.D.	N.D.	N.D.
90	N.D.	N.D.	N.D.	N.D.
91	N.D.	N.D.	N.D.	N.D.
92	N.D.	N.D.	N.D.	N.D.
93	N.D.	N.D.	N.D.	N.D.
96	N.D.	N.D.	N.D.	N.D.
97	N.D.	N.D.	N.D.	N.D.

Note: 1. mg/kg = milligram per kilogram

2. Report Limit = 50mg/kg

3. N.D. = Not Detected (< RL)

RoHS Testing Flow Chart



Phthalates Testing Flow Chart

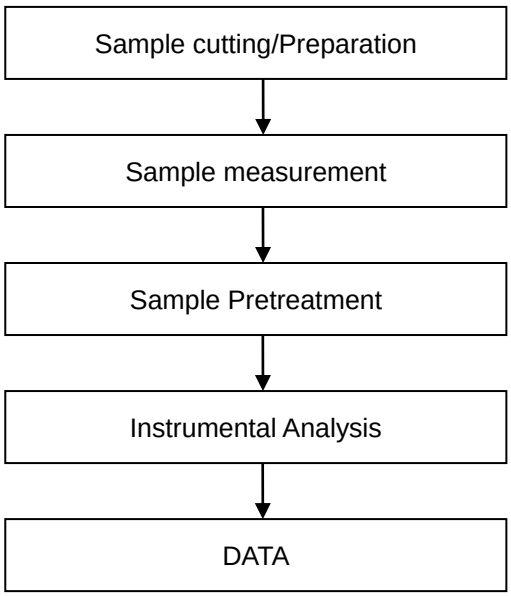


Photo of Sample

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End of Report