

TEST REPORT

Company Name Hunter Douglas Europe B.V.
Shown on Report:
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: M25T-G2
Manufacturer and Factory: Shenzhen BOFU Smart Co., Ltd
Address: 7 floor, No. 92, Tuopu Industrial Zone, Lingxia Road, Bao'an District, Shenzhen
Sample quantity: 1 Pieces
Sample Received Date: Feb.27,2024
Test Period: Feb.27,2024 – Mar.12,2024
Date of Issue: Jun.11,2024

ISSUED BY:

GUANGDONG TITCOBO TESTING CO.,LTD.



Tested by: Jary

Jary

Checked by: Lily

Lily

Approved by: Sam Xie

Sam Xie

Anti-counterfeiting code: zevj

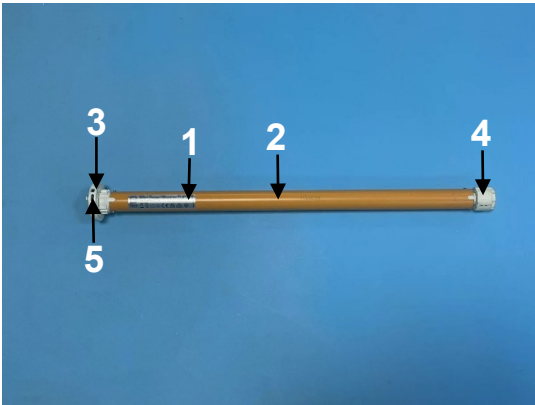
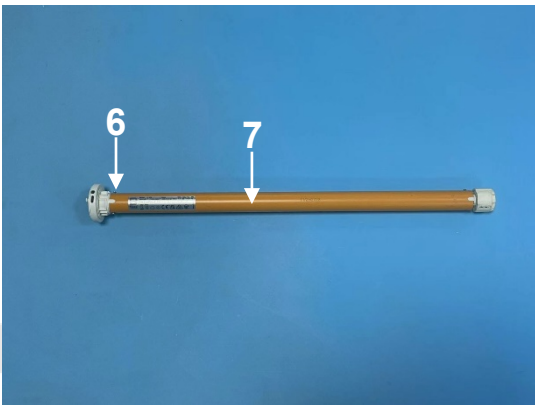
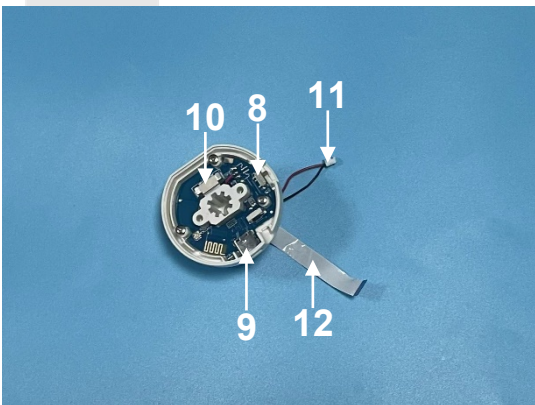
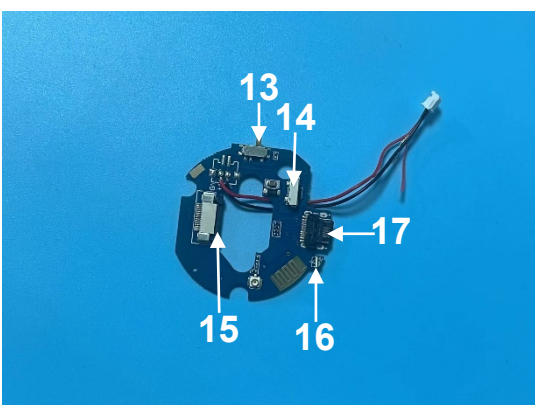
1. Test Requested and Test Conclusion:

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

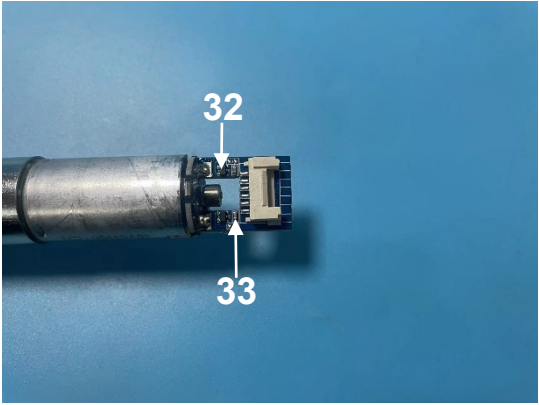
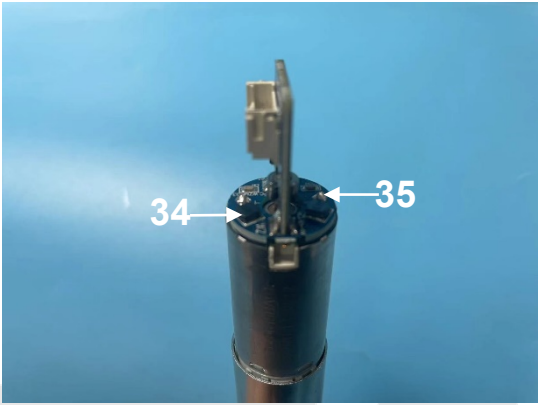
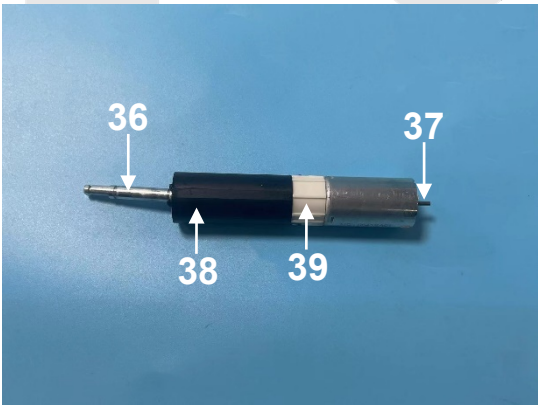
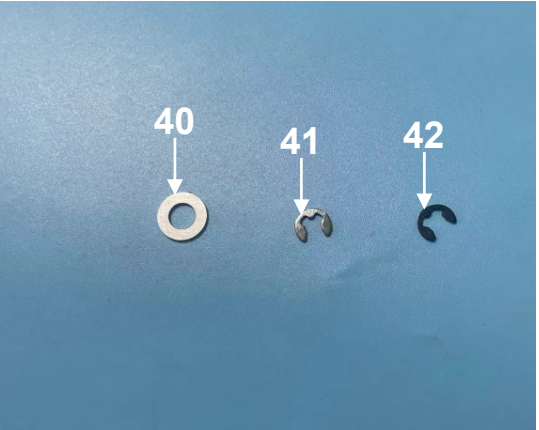
Test items	Conclusion
RoHS Directive 2011/65/EU Revised instructions (EU) 2015/863 of the European parliament and of the council on the restriction of the use of certain hazardous substances in electrical and electronic equipment	
- Lead (Pb)/ Cadmium(Cd)/ Mercury(Hg)/ Hexavalent Chromium(Cr ⁶⁺) content.	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

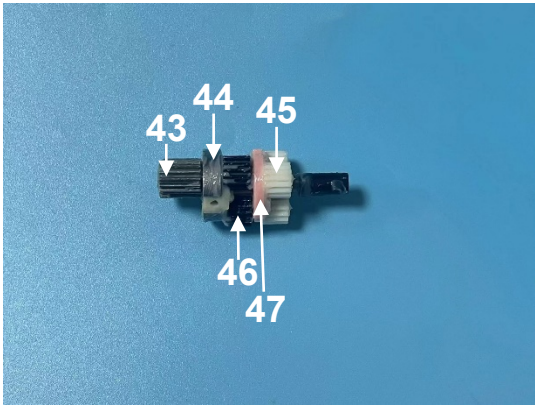
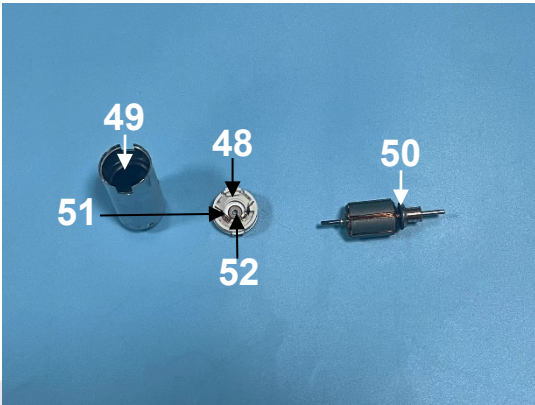
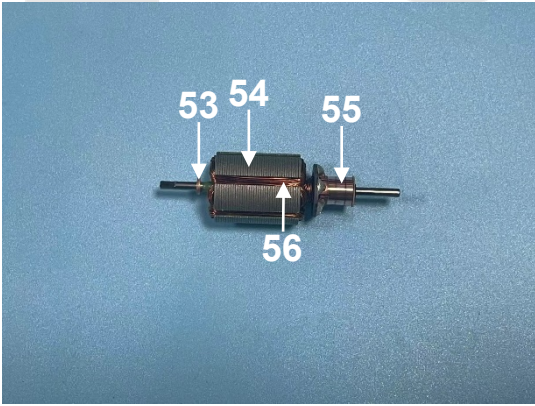
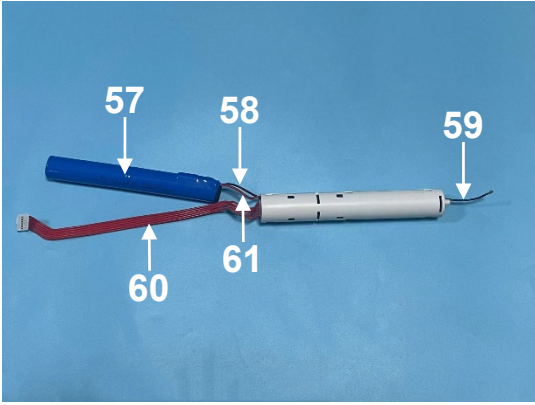


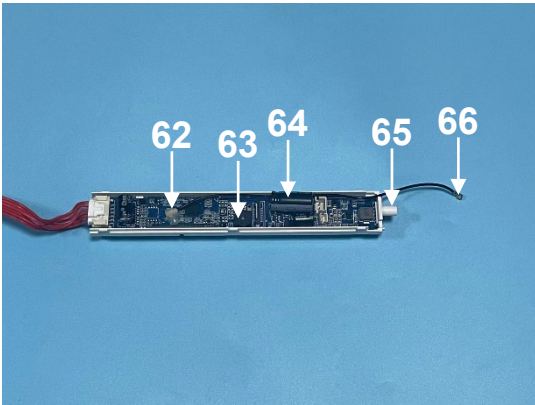
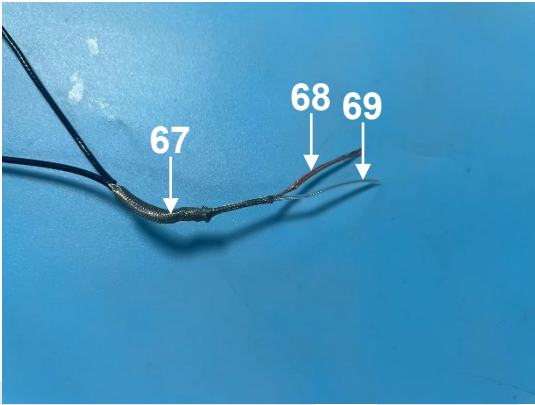
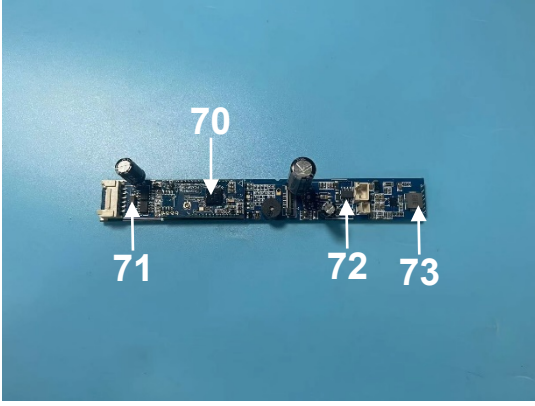
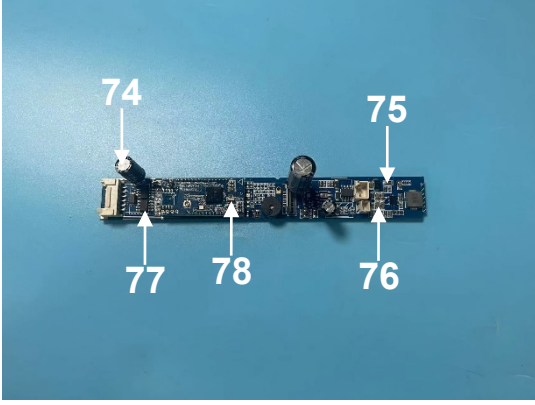
2. Sample description and sample photo list:

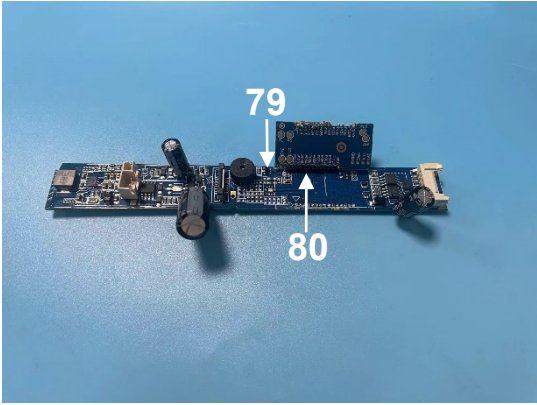
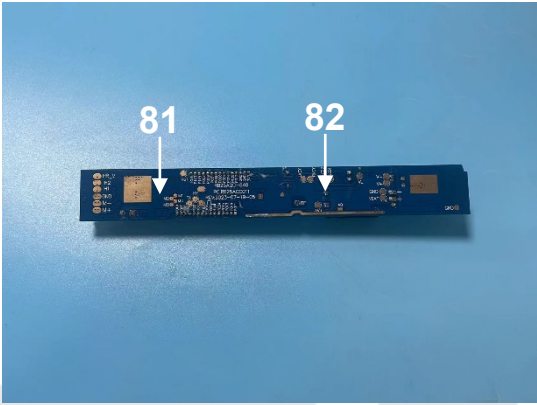
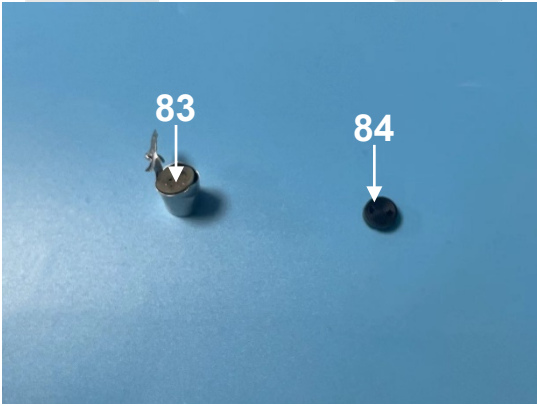
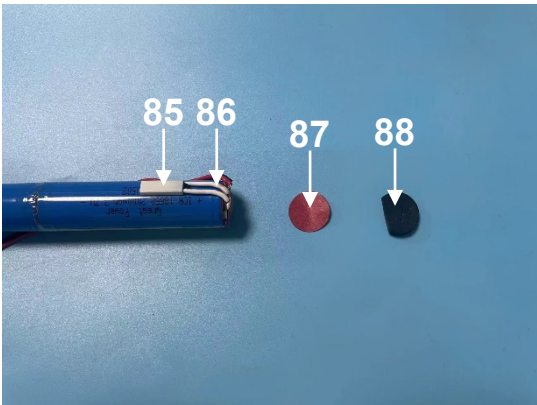
Sample No.	Description	Sample photo
1	Silvery sticker	
2	Yellow plastic	
3	White plastic	
4	White plastic	
5	Black plastic	
6	Silvery metal	
7	Silvery metal(base material)	
8	Silvery metal	
9	Silvery metal	
10	White plastic	
11	White plastic	
12	White plastic	
13	Brown plastic	
14	White plastic	
15	Black plastic	
16	White plastic	
17	Golden metal	

18	Brown capacitor	
19	Black crystal	
20	Red plastic	
21	Black plastic	
22	PCB	
23	Silvery metal	
24	Silvery metal	
25	Silvery metal	
26	Silvery metal	
27	Gray plastic	
28	White plastic	
29	Black plastic	
30	White plastic	
31	PCB	

32	Black crystal	
33	Brown capacitor	
34	Black ceramics	
35	Silvery metal	
36	Silvery metal	
37	Silvery metal	
38	Black plastic	
39	White plastic	
40	Silvery metal	
41	Silvery metal	
42	Silvery metal with black coating	

43	Silvery metal	
44	Silvery metal	
45	White plastic	
46	Black plastic	
47	Pink plastic	
48	White plastic	
49	Black magnet	
50	Black ceramics	
51	Copper metal	
52	Copper metal	
53	Golden metal	
54	Silvery metal	
55	Copper metal	
56	Copper metal	
57	Blue plastic	
58	Black plastic	
59	Black plastic	
60	Red plastic	
61	Red plastic	

62	White plastic	
63	Black plastic	
64	Black plastic	
65	White plastic	
66	Golden metal	
67	Silvery metal	
68	Copper metal foil	
69	Transparent plastic	
70	Black crystal	
71	Black crystal	
72	Black crystal	
73	Gray ceramics	
74	Silvery metal	
75	Brown capacitor	
76	Black resistor	
77	Black crystal	
78	Silvery metal	

79	Black crystal	
80	Black plastic	
81	PCB	
82	Silvery metal	
83	Brown paper	
84	Black plastic	
85	White plastic	
86	White plastic	
87	Red paper	
88	Black foam	

89	White paper	
90	PCB	
91	Black crystal	
92	Silvery metal	
93	Silvery metal	
94	White plastic	

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	BL	BL	NA	BL	BL
7	BL	269 ^a	NA	BL	BL
8	BL	204 ^a	NA	BL	BL
9	98518 ^a	BL	NA	BL	BL
10	BL	BL	BL	BL	BL
11	BL	BL	BL	BL	BL
12	BL	BL	16309 ^a	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	132 ^a	NA	BL	BL
18	BL	BL	BL	BL	BL
19	BL	BL	BL	BL	BL
20	BL	BL	BL	BL	BL
21	BL	BL	BL	BL	BL
22	BL	BL	BL	BL	BL
23	BL	430 ^a	NA	BL	BL
24	BL	BL	NA	BL	BL
25	322 ^a	BL	NA	BL	BL
26	233 ^a	BL	NA	BL	825 ^a
27	BL	BL	BL	BL	BL
28	BL	BL	31676 ^a	BL	BL
29	BL	BL	31675 ^a	BL	BL
30	BL	BL	BL	BL	BL
31	BL	BL	BL	BL	BL

32	BL	BL	BL	BL	BL
33	BL	BL	BL	BL	BL
34	BL	BL	BL	BL	BL
35	BL	BL	NA	BL	BL
36	323 ^a	BL	NA	BL	BL
37	99234 ^a	241 ^a	NA	BL	BL
38	BL	BL	BL	BL	BL
39	BL	BL	BL	BL	BL
40	330 ^a	BL	NA	BL	BL
41	121869 ^a	265 ^a	NA	BL	BL
42	366 ^a	78 ^a	NA	BL	BL
43	483 ^a	BL	NA	BL	BL
44	12611 ^a	BL	NA	BL	206 ^a
45	BL	BL	BL	BL	BL
46	BL	BL	BL	BL	BL
47	BL	BL	BL	BL	BL
48	BL	BL	14576 ^a	BL	BL
49	BL	BL	BL	BL	BL
50	BL	BL	BL	BL	BL
51	BL	58 ^a	NA	BL	BL
52	BL	100 ^a	NA	BL	BL
53	267 ^a	BL	NA	BL	BL
54	3662 ^a	BL	NA	BL	BL
55	BL	BL	NA	BL	BL
56	BL	BL	NA	BL	266 ^a
57	BL	BL	BL	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	45549 ^a	BL	BL
66	BL	229 ^a	NA	BL	BL
67	BL	BL	NA	BL	BL
68	BL	BL	NA	BL	BL
69	BL	BL	BL	BL	BL
70	BL	BL	BL	BL	BL

71	BL	BL	BL	BL	BL
72	BL	BL	BL	BL	BL
73	14657 ^a	BL	BL	BL	BL
74	BL	BL	NA	BL	1808 ^a
75	BL	BL	BL	BL	BL
76	BL	BL	BL	BL	BL
77	BL	BL	BL	BL	BL
78	BL	377 ^a	NA	BL	BL
79	BL	BL	BL	BL	BL
80	BL	BL	36879 ^a	BL	BL
81	BL	BL	BL	BL	BL
82	BL	BL	NA	BL	BL
83	BL	BL	BL	BL	BL
84	BL	BL	BL	BL	BL
85	BL	BL	16491 ^a	BL	BL
86	BL	BL	BL	BL	BL
87	BL	BL	BL	BL	BL
88	BL	BL	BL	BL	BL
89	BL	BL	BL	BL	BL
90	BL	BL	222 ^a	BL	BL
91	BL	BL	BL	BL	BL
92	409 ^a	BL	NA	BL	BL
93	BL	BL	NA	BL	BL
94	BL	BL	BL	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 62321-4:2017 analysis was performed by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES).

Hexavalent Chromium(Cr⁶⁺): 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				
7	--	--	N.D.	--	--
8	--	--	N.D.	--	--
9	/	Negative	--	--	--
17	--	--	N.D.	--	--
23	--	--	N.D.	--	--
25	/	Negative	--	--	--
26	/	Negative	--	--	N.D.
36	/	Negative	--	--	--
37	/	Negative	N.D.	--	--
40	/	Negative	--	--	--
41	/	Negative	N.D.	--	--
42	/	Negative	N.D.	--	--
43	/	Negative	--	--	--
44	/	Negative	--	--	N.D.
51	--	--	N.D.	--	--
52	--	--	N.D.	--	--
53	/	Negative	--	--	--
54	/	Negative	--	--	--
56	--	--	--	--	N.D.
66	--	--	N.D.	--	--
73	N.D.	/	--	--	--
74	--	--	--	--	N.D.
78	--	--	N.D.	--	--
92	/	Negative	--	--	--

- Note:
1. RL (Report Limit) = Pb, Cd, Hg: 10mg/kg;Cr⁶⁺: nonmetal -10mg/kg, metal- Negative(<0.1µg/cm²).
 2. mg/kg = milligram per kilogram, µg/cm²= micrograms per square centimeter.
 3. N.D. = Not Detected (< RL).
 4. Negative = Surface of metal sample absence of Cr⁶⁺, Positive = Surface of metal sample presence of Cr⁶⁺.
 5. "--" 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)				
				12	28	29	48	65
PBBs	Monobromobiphenyl	--	5	N.D.	N.D.	N.D.	N.D.	N.D.
	Dibromobiphenyl	--	5	N.D.	N.D.	N.D.	N.D.	N.D.
	Tribromobiphenyl	--	5	N.D.	N.D.	N.D.	N.D.	N.D.
	Tetrabromobiphenyl	--	5	N.D.	N.D.	N.D.	N.D.	N.D.
	Pentabromobiphenyl	--	5	N.D.	N.D.	N.D.	N.D.	N.D.
	Hexabromobiphenyl	--	5	N.D.	N.D.	N.D.	N.D.	N.D.
	Heptabromobiphenyl	--	5	N.D.	N.D.	N.D.	N.D.	N.D.
	Octabromobiphenyl	--	5	N.D.	N.D.	N.D.	N.D.	N.D.
	Nonabromobiphenyl	--	5	N.D.	N.D.	N.D.	N.D.	N.D.
	Decabromobiphenyl	--	5	N.D.	N.D.	N.D.	N.D.	N.D.
	Sum of detected PBBs	1000	--	N.D.	N.D.	N.D.	N.D.	N.D.
PBDEs	Monobromodiphenylether	--	5	N.D.	N.D.	N.D.	N.D.	N.D.
	Dibromodiphenylether	--	5	N.D.	N.D.	N.D.	N.D.	N.D.
	Tribromodiphenylether	--	5	N.D.	N.D.	N.D.	N.D.	N.D.
	Tetrabromodiphenylether	--	5	N.D.	N.D.	N.D.	N.D.	N.D.
	Pentabromodiphenylether	--	5	N.D.	N.D.	N.D.	N.D.	N.D.
	Hexabromodiphenylether	--	5	N.D.	N.D.	N.D.	N.D.	N.D.
	Heptabromodiphenylether	--	5	N.D.	N.D.	N.D.	N.D.	N.D.
	Octabromodiphenylether	--	5	N.D.	N.D.	N.D.	N.D.	N.D.
	Nonabromodiphenylether	--	5	N.D.	N.D.	N.D.	N.D.	N.D.
	Decabromodiphenylether	--	5	N.D.	N.D.	N.D.	N.D.	N.D.
	Sum of detected PBDEs	1000	--	N.D.	N.D.	N.D.	N.D.	N.D.

Test Item		Limit (mg/kg)	RL (mg/kg)	Result(mg/kg)		
				80	85	90
PBBs	Monobromobiphenyl	--	5	N.D.	N.D.	N.D.
	Dibromobiphenyl	--	5	N.D.	N.D.	N.D.
	Tribromobiphenyl	--	5	N.D.	N.D.	N.D.
	Tetrabromobiphenyl	--	5	N.D.	N.D.	N.D.
	Pentabromobiphenyl	--	5	N.D.	N.D.	N.D.
	Hexabromobiphenyl	--	5	N.D.	N.D.	N.D.
	Heptabromobiphenyl	--	5	N.D.	N.D.	N.D.
	Octabromobiphenyl	--	5	N.D.	N.D.	N.D.
	Nonabromobiphenyl	--	5	N.D.	N.D.	N.D.
	Decabromobiphenyl	--	5	N.D.	N.D.	N.D.
	Sum of detected PBBs	1000	--	N.D.	N.D.	N.D.
PBDEs	Monobromodiphenylether	--	5	N.D.	N.D.	N.D.
	Dibromodiphenylether	--	5	N.D.	N.D.	N.D.
	Tribromodiphenylether	--	5	N.D.	N.D.	N.D.
	Tetrabromodiphenylether	--	5	N.D.	N.D.	N.D.
	Pentabromodiphenylether	--	5	N.D.	N.D.	N.D.
	Hexabromodiphenylether	--	5	N.D.	N.D.	N.D.
	Heptabromodiphenylether	--	5	N.D.	N.D.	N.D.
	Octabromodiphenylether	--	5	N.D.	N.D.	N.D.
	Nonabromodiphenylether	--	5	N.D.	N.D.	N.D.
	Decabromodiphenylether	--	5	N.D.	N.D.	N.D.
	Sum of detected PBDEs	1000	--	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

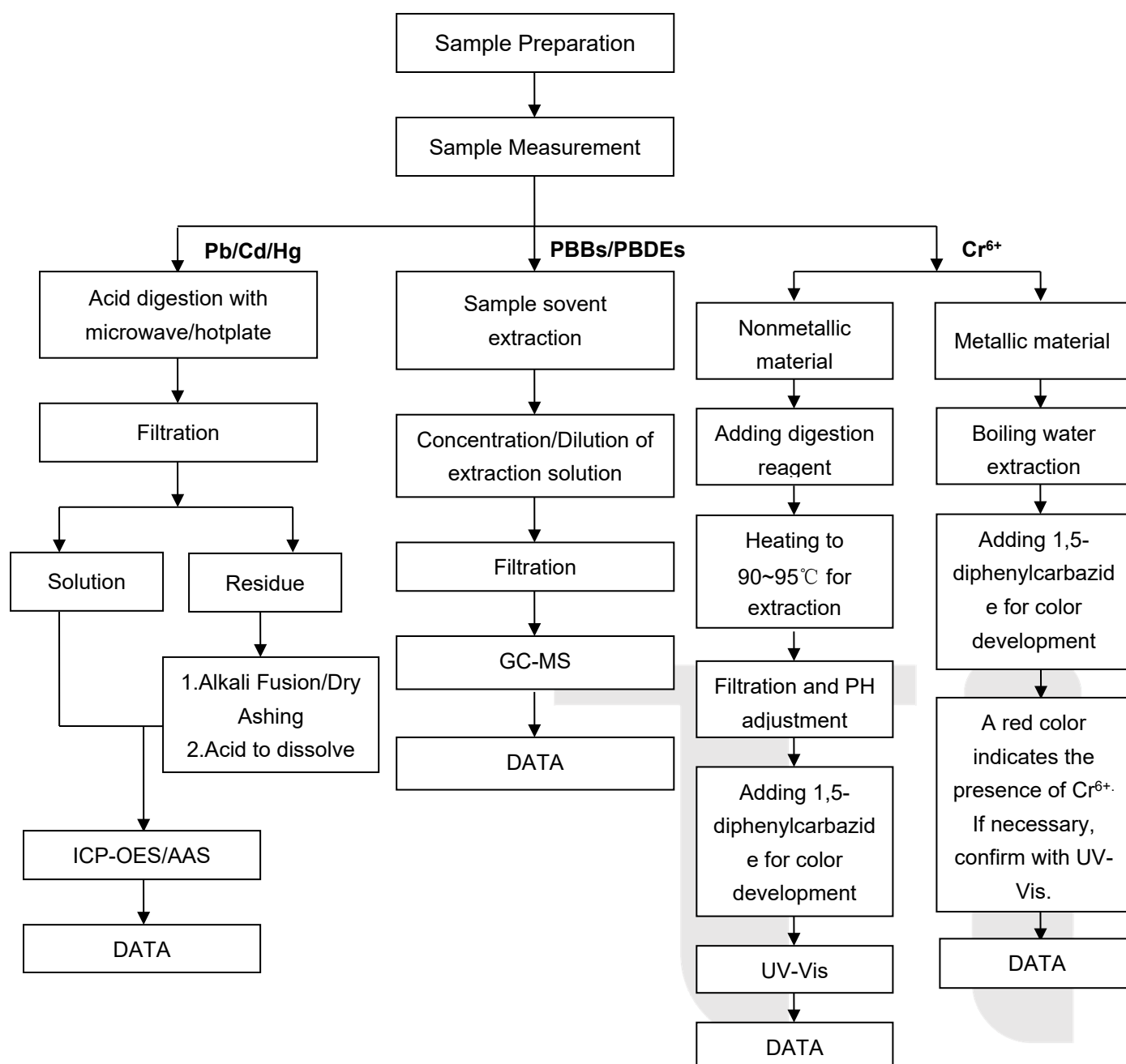
Test Method: IEC 62321-8:2017, analysis was performed by Gas Chromatograph-Mass Spectrometer (GC-MS).

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.
10	N.D.	N.D.	N.D.	N.D.
11	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.
27	N.D.	N.D.	N.D.	N.D.
28	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.
38	N.D.	N.D.	N.D.	N.D.
39	N.D.	N.D.	N.D.	N.D.
45	N.D.	N.D.	N.D.	N.D.
46	N.D.	N.D.	N.D.	N.D.
47	N.D.	N.D.	N.D.	N.D.
48	N.D.	N.D.	N.D.	N.D.
57	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.
69	N.D.	N.D.	N.D.	N.D.
80	N.D.	N.D.	N.D.	N.D.
81	N.D.	N.D.	N.D.	N.D.
83	N.D.	N.D.	N.D.	N.D.
84	N.D.	N.D.	N.D.	N.D.
85	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.
94	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

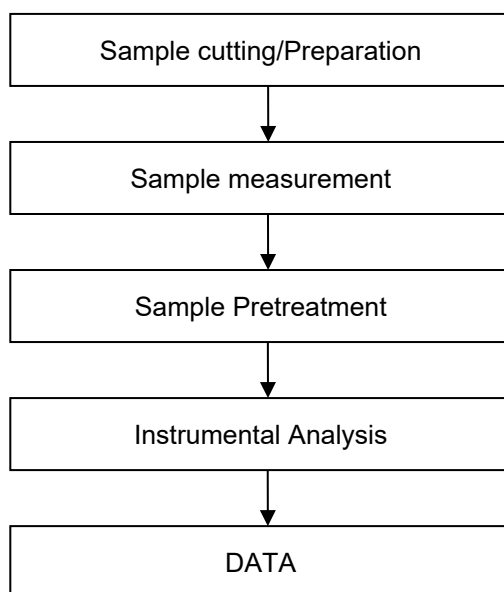


Photo of Sample



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Statement

1. The laboratory guarantees the scientificity, accuracy and impartiality of the test, and is responsible for all the information in the report, except the information provided by the customer. The customer is responsible for the impact of the information provided on the validity of the results.
2. The report without China inspection body and laboratory Mandatory Approval (CMA) mark has no effect of proving to the society.
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4. This report is invalid if it is altered, without the signature of the testing and approval personnel, or without the "inspection and testing dedicated stamp" or test report stamp.
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End of Report

