

# TEST REPORT

<b><u>APPLICANT</u></b>	: WENZHOU AIER ELECTRICAL TECHNOLOGY CO.,LTD
<b><u>ADDRESS</u></b>	: XIASONG ROAD, WANQUAN INDUSTRIAL ZONE, PINGYANG, ZHEJIANG, CHINA
<b><u>SAMPLE DESCRIPTION</u></b>	: Electric cleaning brush
<b><u>ITEM NO.</u></b>	: AE-868
<b><u>REFERENCE ITEM NO.</u></b>	: AE-868A, AE-868B, AE-878, AE-878A, AE-8788,AE-8688B, AE-8299, AE-8266,AE-8381A, AE-8382, AE-8384, AE-8385, AE-8386, AE- 8386A, AE-8387, AE-8387A, AE-8388, AE-8286B, AE-605, AE-605A, AE-605B, AE-616, AE-616A, AE-617, AE-617A, AE-618, AE-619
<b><u>SAMPLE RECEIVED DATE</u></b>	: 29 - Oct - 2024
<b><u>FURTHER INFORMATION DATE</u></b>	: 13 - Dec - 2024
<b><u>TURN AROUND TIME</u></b>	: 29 - Oct - 2024 to 13 - Dec - 2024
<b><u>TEST SPECIFICATION</u></b>	: Total concentration of Lead, Cadmium, Mercury, Chromium VI, Polybrominated Biphenyls (PBBs), Polybrominated Diphenyl Ethers (PBDEs) , Bis(2-ethylhexyl) phthalate (DEHP) , Butyl benzyl phthalate (BBP) , Dibutyl phthalate (DBP) and Diisobutyl phthalate (DIBP) in accordance with EC Directive 2011/65/EU and its amendment Directive (EU) 2015/863 (RoHS)
<b><u>CONCLUSION</u></b>	: Based on the analysis on the submitted sample(s), the test results do comply with the concentration limits as specified in Annex II to Directive 2011/65/EU and its amendment Directive (EU) 2015/863.

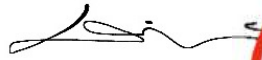
The reference item numbers have not been tested in current report, but according to applicant's request, the item numbers have also been included.

The following test item(s) was/were performed on submitted sample(s) and/or component(s) appointed by applicant.

*Samples are obtained by express delivery, Results obtained refer only to samples, products or material received in Laboratory, as described in point related to sample description, and tested in conditions shown in present report. Eurofins Product Testing Service (Hangzhou) Co., Ltd ensures that this job has been performed according to our Quality System and complying contract and legal conditions. Unless otherwise stated from the customer, regulation or the standard specification, Eurofins will consider the measurement uncertainty as calculated by our laboratory and apply according to ILAC G8:09/2019-(binary acceptance base on guard band). If you happen to have any comments, please do it by sending email to [info.hz@cpt.eurofinscn.com](mailto:info.hz@cpt.eurofinscn.com) and referring to this report number. Reproduction of this document is only valid if it is done completely and under the written permission of Eurofins Product Testing Service (Hangzhou) Co., Ltd. If you happen to have any complaints, please do it by sending email to [chinacomplaint.hz@cpt.eurofinscn.com](mailto:chinacomplaint.hz@cpt.eurofinscn.com) and referring to this report number.*

**Eurofins (Hangzhou) contact information****Customer service:** [Valentine.Deng@cpt.eurofinscn.com](mailto:Valentine.Deng@cpt.eurofinscn.com)/ +86 571 87203730**Sales specialist:** [Lily.Li@cpt.eurofinscn.com](mailto:Lily.Li@cpt.eurofinscn.com)/ +86 15258299691

\*\*\*\*\* FOR FURTHER DETAILS, PLEASE REFER TO THE FOLLOWING PAGE(S) \*\*\*\*\*

Signed for and on behalf of  
Eurofins Product Testing Service (Hangzhou) Co., LtdLincoln Shi  
Operation Manager

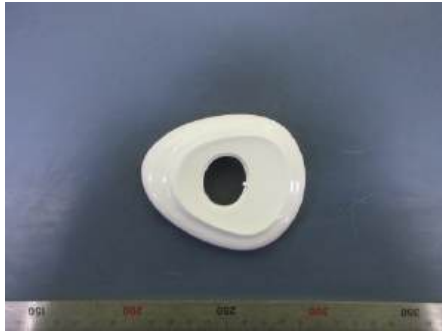
**SAMPLE PHOTO(S)**



**EFHZ24104492-CG-01**

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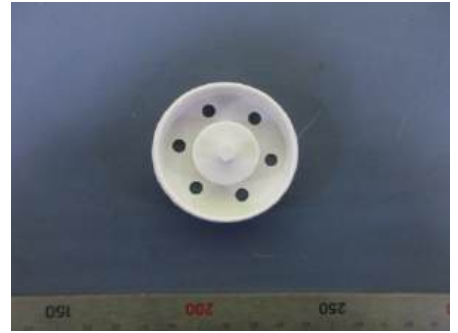
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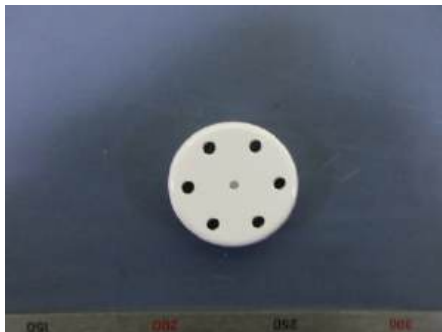
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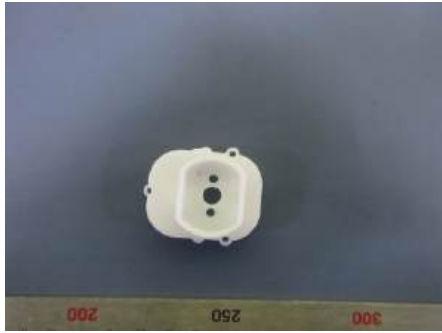
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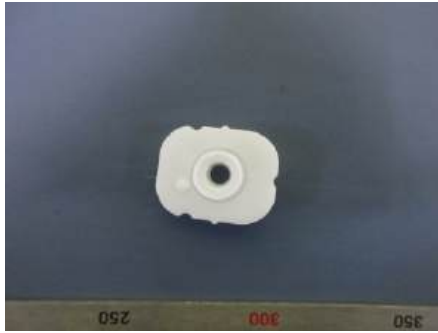
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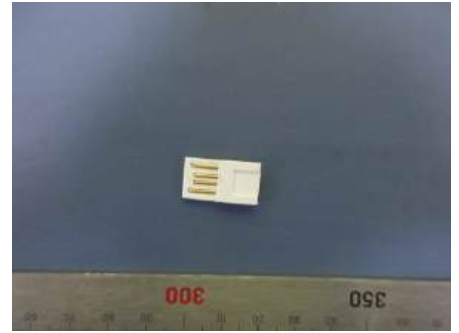
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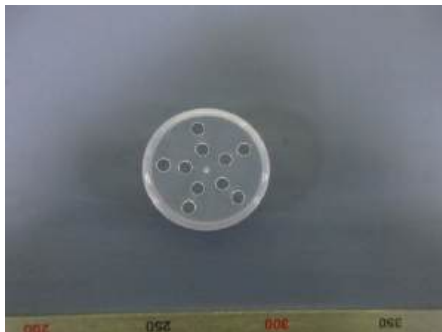
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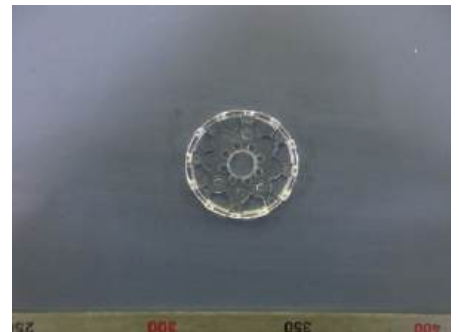
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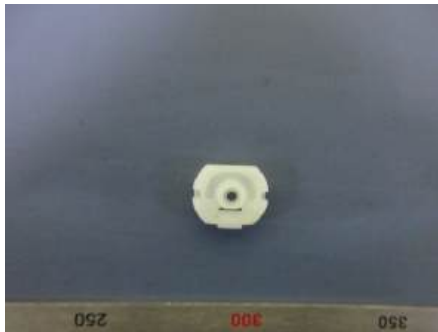
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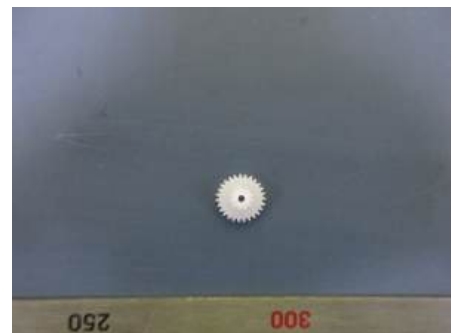
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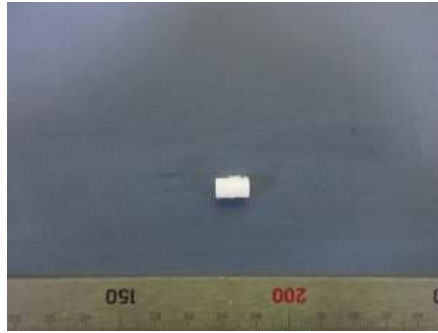
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## COMPONENT PHOTO(S)



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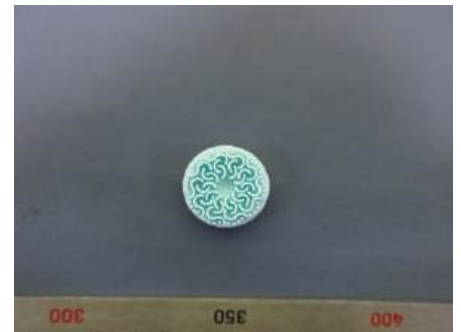
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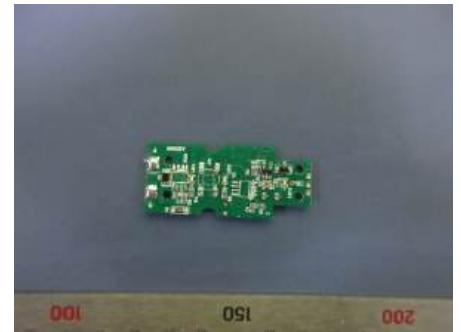
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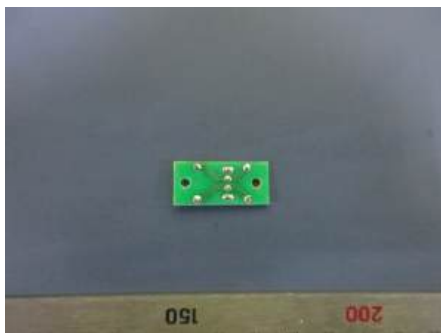
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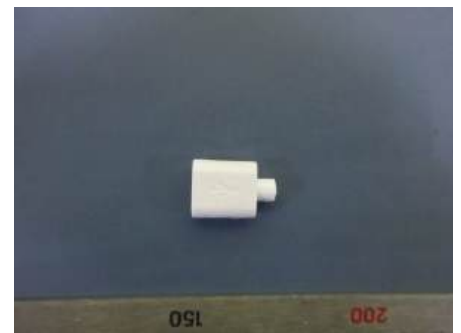
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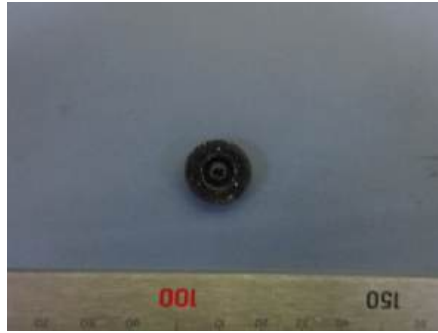
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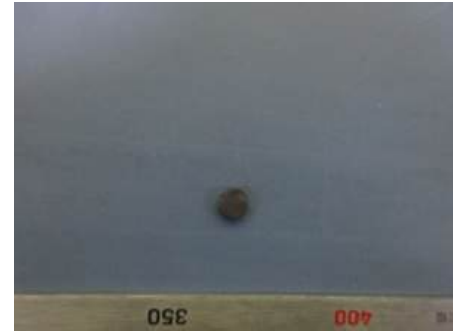
**COMPONENT PHOTO(S)**



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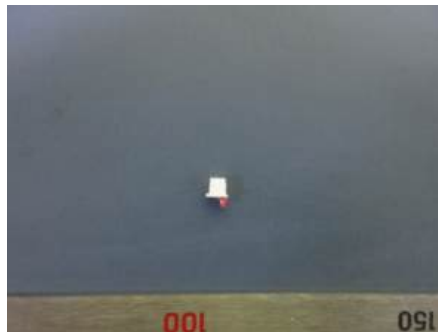
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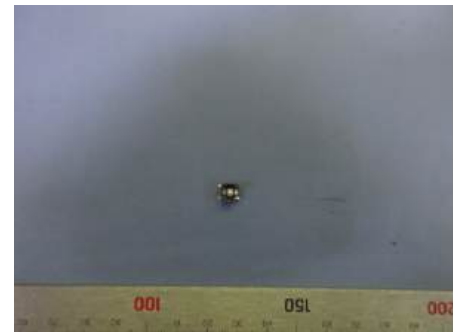
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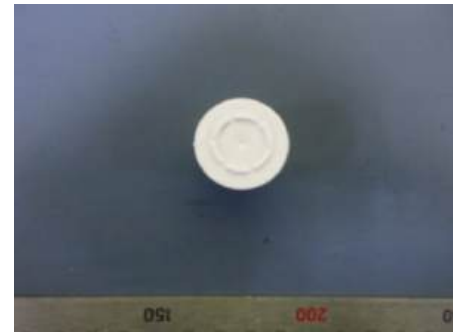
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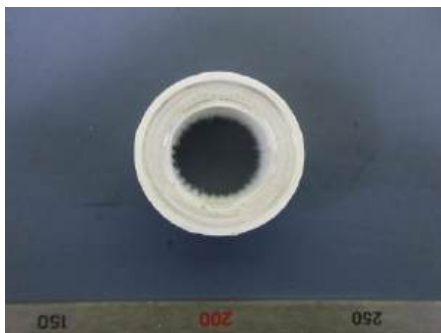
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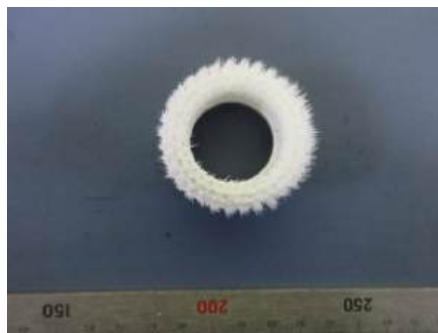
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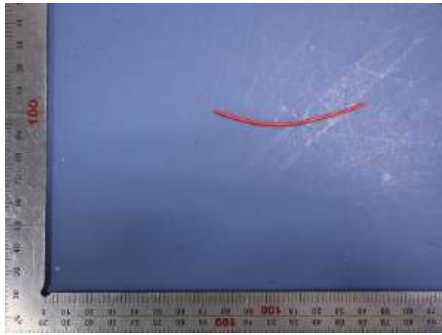
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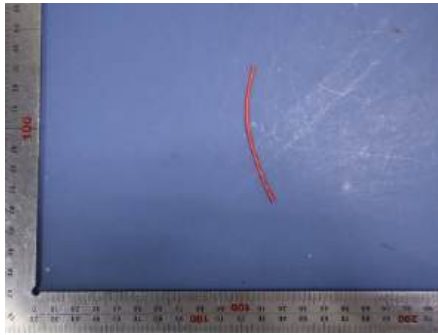
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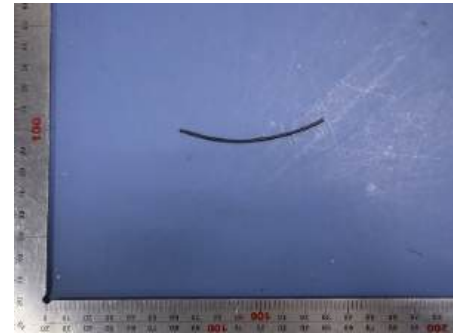
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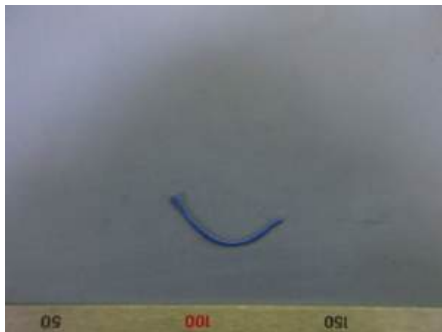
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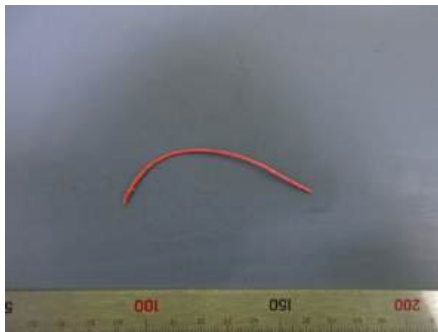
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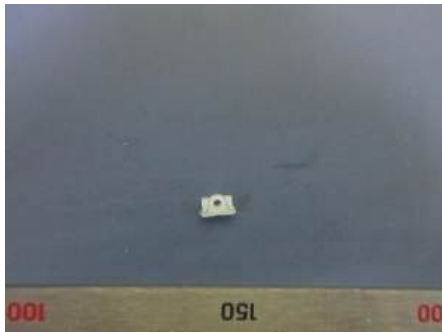
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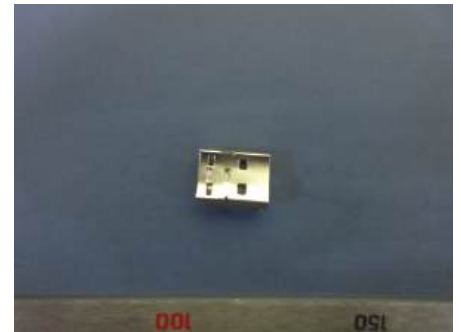
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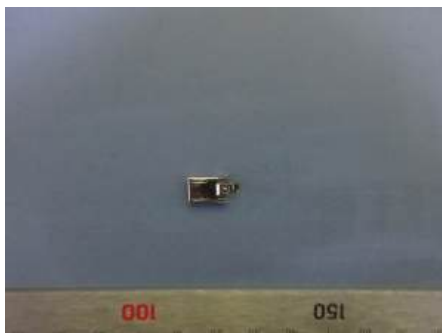
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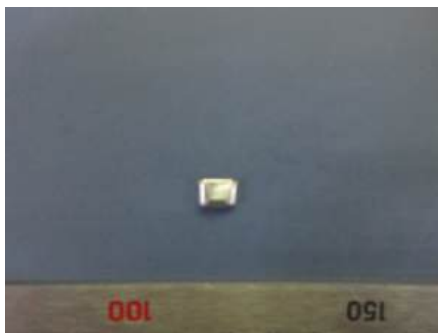
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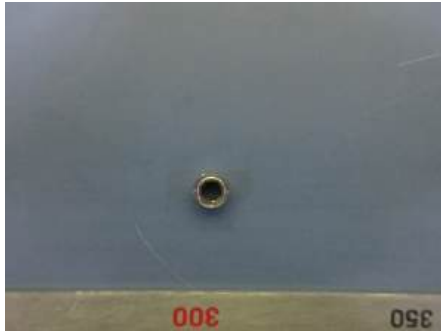
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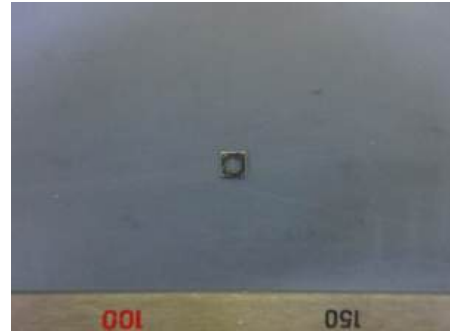
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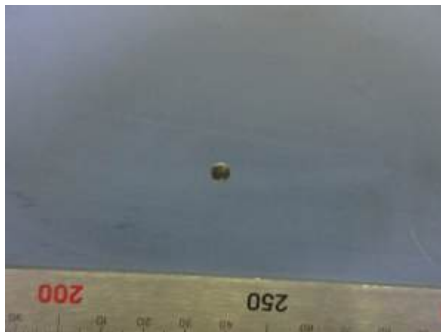
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**COMPONENT PHOTO(S)**



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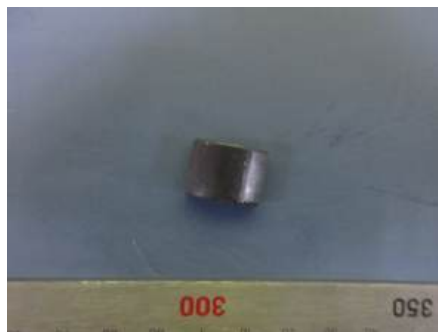
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## TEST RESULT

### Part 1

#### A. Screening Test by XRF Spectroscopy

As specified by client, to analyze the contents of Lead, Cadmium, Mercury, Chromium, Bromine in the submitted sample by XRF. Screening limits in mg/kg for regulated elements in various matrices according to IEC 62321-3-1:2013

No.	Component	Test Results (mg/kg)				
		Cd	Pb	Hg	Cr	Br
		Limit (mg/kg)				
		100	1000	1000	Cr(VI): 1000	PBB:1000 PBDE:1000
1	White plastic block 1	BL	BL	BL	BL	BL
2	White plastic block 2	BL	BL	BL	BL	BL
3	White plastic block 3	BL	BL	BL	BL	BL
4	White plastic block 4	BL	BL	BL	BL	BL
5	White plastic block 5	BL	BL	BL	BL	BL
6	White plastic block 6	BL	BL	BL	BL	BL
7	White plastic block 7	BL	BL	BL	BL	BL
8	White plastic block 8	BL	BL	BL	BL	BL
9	White plastic block 9	BL	BL	BL	BL	BL
10	Blue green plastic block 1	BL	BL	BL	BL	BL
11	White plastic block 10	BL	BL	BL	BL	BL
12	Blue green plastic block 2	BL	BL	BL	BL	BL
13	White plastic block 11	BL	BL	BL	BL	BL
14	White plastic block 12	BL	BL	BL	BL	BL
15	White plastic tongue	BL	BL	BL	BL	BL
16	Transparent plastic block 1	BL	BL	BL	BL	BL
17	Transparent plastic block 2	BL	BL	BL	BL	BL
18	Transparent plastic block 3	BL	BL	BL	BL	BL
19	Transparent plastic block 4	BL	BL	BL	BL	BL
20	Tooth colored plastic block	BL	BL	BL	BL	BL
21	White plastic gear 1	BL	BL	BL	BL	BL
22	White plastic gear 2	BL	BL	BL	BL	BL
23	White plastic gear 3	BL	BL	BL	BL	BL
24	White plastic gear 4	BL	BL	BL	BL	BL
25	White plastic gear 5	BL	BL	BL	BL	BL
26	White plastic block 13	BL	BL	BL	BL	BL
27	Green soft plastic ring 1	BL	BL	BL	BL	BL
28	Green soft plastic ring 2	BL	BL	BL	BL	BL
29	Blue green soft plastic block 2	BL	BL	BL	BL	BL
30	Blue green soft plastic block 3	BL	BL	BL	BL	BL
31	Blue green soft plastic button	BL	BL	BL	BL	BL
32	White soft plastic plug	BL	BL	BL	BL	BL
33	Green circuit board 1	BL	BL	BL	BL	NC
34	Green circuit board 2	BL	BL	BL	BL	NC
35	Green circuit board 3	BL	BL	BL	BL	BL
36	White soft plastic plug 1	BL	BL	BL	BL	BL
37	White soft plastic plug 2	BL	BL	BL	BL	BL
38	Black soft plastic block	BL	BL	BL	BL	BL
39	Black foam pad	BL	BL	BL	BL	BL
40	Beige plastic pin holder	BL	BL	BL	BL	NC

\*\*\*TO BE CONTINUED\*\*\*

## TEST RESULT

41	White plastic connector	BL	BL	BL	BL	BL
42	Black plastic block	BL	BL	BL	BL	BL
43	Black plastic button	BL	BL	BL	BL	BL
44	Green soft plastic bristles	BL	BL	BL	BL	BL
45	White plastic block 14	BL	BL	BL	BL	BL
46	White plastic block 15	BL	BL	BL	BL	BL
47	White soft plastic bristles	BL	BL	BL	BL	BL
48	White wire leather sheath	BL	BL	BL	BL	BL
49	Red wire sheath 1	BL	BL	BL	BL	BL
50	Red wire sheath 2	BL	BL	BL	BL	BL
51	Black wire sheath 1	BL	BL	BL	BL	BL
52	Blue wire sheath	BL	BL	BL	BL	BL
53	Red wire sheath 3	BL	BL	BL	BL	BL
54	Black wire sheath 2	BL	BL	BL	BL	BL
55	Tooth colored plastic block 2	BL	BL	BL	BL	BL
56	Silver metal casing	BL	BL	BL	NC	NA
57	Silver metal block 1	BL	BL	BL	NC	NA
58	Silver metal block 2	BL	BL	BL	NC	NA
59	Silver metal block 3	BL	BL	BL	NC	NA
60	Silver metal shaft 1	BL	BL	BL	NC	NA
61	Silver metal block 4	BL	BL	BL	NC	NA
62	Silver metal shaft 2	BL	BL	BL	NC	NA
63	Silver metal block 5	BL	BL	BL	NC	NA
64	Silver metal disc	BL	BL	BL	NC	NA
65	Silver copper metal pins	BL	BL	BL	NC	NA
66	Copper colored metal sheet	BL	BL	BL	NC	NA
67	Copper colored metal block 1	BL	BL	BL	NC	NA
68	Copper colored metal block 2	BL	BL	BL	NC	NA
69	Copper colored wire	BL	BL	BL	NC	NA
70	Silver wire	BL	BL	BL	NC	NA
71	Silver gray metal card spring	BL	BL	BL	NC	NA
72	Silver metal screw 1	BL	BL	BL	NC	NA
73	Silver metal screw 2	BL	BL	BL	NC	NA
74	Silver metal screw 3	BL	BL	BL	NC	NA
75	Silver metal screw 4	BL	BL	BL	NC	NA
76	Silver components	BL	BL	BL	NC	NA
77	Black magnetic tile	BL	BL	BL	NC	NA
78	White sticker with black printing	BL	BL	BL	BL	BL
79	Copper rectifier	BL	BL	BL	NC	NA
80	Copper colored metal coil	BL	BL	BL	NC	NA
81	Silver metal block 6	BL	BL	BL	NC	NA
82	Silver metal shaft 3	BL	BL	BL	NC	NA
83	Silver solder	BL	NC	BL	NC	NA
84	Silver metal block 7	BL	BL	BL	NC	NA

\*\*\*TO BE CONTINUED\*\*\*

## TEST RESULT

Abbreviation:	Pb	denotes Lead
	Cd	denotes Cadmium
	Hg	denotes Mercury
	Cr	denotes Chromium
	Cr(VI)	denotes Chromium(VI)
	Br	denotes Bromine
	PBBs	denotes Total Polybrominated Biphenyls
	PBDEs	denotes Total Polybrominated Diphenyl Ethers
	NA	denotes Not Applicable
	NC	denotes Not Conclusive
	BL	denotes Below limit

XRF Screening limits for different materials:

Element	Polymers	Metals	Composite Material
Cd	$BL \leq (70-3\sigma) < X < (130+3\sigma) \leq OL$	$BL \leq (70-3\sigma) < X < (130+3\sigma) \leq OL$	$LOD < X < (150+3\sigma) \leq OL$
Pb	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (500-3\sigma) < X < (1500+3\sigma) \leq OL$
Hg	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (500-3\sigma) < X < (1500+3\sigma) \leq OL$
Br	$BL \leq (300-3\sigma) < X$	/	$BL \leq (250-3\sigma) < X$
Cr	$BL \leq (700-3\sigma) < X$	$BL \leq (700-3\sigma) < X$	$BL \leq (500-3\sigma) < X$

**Note:**

BL= Below limit

X = The region where further investigation is necessary

OL = Over limit

$3\sigma$  = The repeatability of the analyzer at the action level

LOD = Limit of detection

XRF testing results are only used for reference.

\*\*\*TO BE CONTINUED\*\*\*

## TEST RESULT

### B. Confirmation Test by Wet Chemistry

Tested Item(s)	Test Method	Measured Equipment	MDL
Lead (Pb) /Cadmium (Cd)	IEC 62321-5:2013	ICP-OES	10 mg/kg
Mercury (Hg)	IEC 62321-4:2013/AMD1:2017	ICP-OES	10 mg/kg
Hexavalent Chromium (Cr(VI))	IEC 62321-7-1:2015	UV-Vis	0.01 $\mu$ g/cm <sup>2</sup>
	IEC62321-7-2:2017		10 mg/kg
Polybrominated Biphenyls (PBBs)	IEC 62321-6:2015	GC-MS	50 mg/kg
Polybrominated DiphenylEthers (PBDEs)			

Component No.	Boiling-water-extraction for Cr(VI) (*1)
56	Negative
57	Negative
58	Negative
59	Negative
60	Negative
61	Negative
62	Negative
63	Negative
64	Negative
65	Negative
66	Negative
67	Negative
68	Negative
69	Negative
70	Negative
71	Negative
72	Negative
73	Negative
74	Negative
75	Negative
76	Negative
77	Negative
79	Negative
80	Negative
81	Negative
82	Negative
83	Negative
84	Negative

#### Remark:

(\*1) The screening result of Chromium (VI) was found in the inconclusive region, Thus the Chromium(VI) content in surface layer have been confirmed with reference to IEC 62321-7-1:2015.

Negative - The Cr(VI) concentration is below 0.10 $\mu$ g/cm<sup>2</sup>.The coating is considered a non-Cr(VI) based coating.

\*\*\*TO BE CONTINUED\*\*\*

## TEST RESULT

Component No.	Test Results (mg/kg)					
	Cd	Pb	Hg	Cr (VI)	PBBs	PBDEs
	Limit (mg/kg)					
	100	1000	1000	1000	1000	1000
33	\	\	\	\	ND	ND
34	\	\	\	\	ND	ND
40	\	\	\	\	ND	ND
83	\	ND	\	\	\	\

**Note:**

The sample had been dissolved totally tested for Lead, Cadmium, Mercury.

MDL = method detection limit

ND = not detected (<MDL)

mg/kg = ppm = parts per million

µg/cm<sup>2</sup> = micrograms per square centimeter

\*\*\*TO BE CONTINUED\*\*\*

## TEST RESULT

### Part 2

Diisobutyl phthalate (DIBP), Bis (2- ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP) and Dibutyl phthalate (DBP)

Test specification : Total concentration of Bis(2-ethylhexyl) phthalate (DEHP) , Butyl benzyl phthalate (BBP) , Dibutyl

phthalate (DBP) and Diisobutyl phthalate (DIBP) in accordance with EC Directive 2011/65/EU and its amendment Directive (EU) 2015/863 (RoHS)

Test method : IEC 62321-8:2017

Limit : Annex II to Directive 2011/65/EU and its amendment Directive (EU) 2015/863

Component	Test Results (%)			
	DIBP	DEHP	BBP	DBP
	Limit (%)			
	0.1%	0.1%	0.1%	0.1%
1+2+3	ND	ND	ND	ND
4+5+6	ND	ND	ND	ND
7+8+9	ND	ND	ND	ND
10+11+12	ND	ND	ND	ND
13+14+15	ND	ND	ND	ND
16+17+18	ND	ND	ND	ND
19+20+21	ND	ND	ND	ND
22+23+24	ND	ND	ND	ND
25+26+27	ND	ND	ND	ND
28+29+30	ND	ND	ND	ND
31+32+33	ND	ND	ND	ND
34+35+36	ND	ND	ND	ND
37+38+39	ND	ND	ND	ND
40+41+42	ND	ND	ND	ND
43+44+45	ND	ND	ND	ND
46+47+48	ND	ND	ND	ND
49	ND	ND	ND	ND
50	ND	ND	ND	ND
51	ND	ND	ND	ND
52+53+54	ND	ND	ND	ND
55	ND	ND	ND	ND

**Note:**

ND = Not Detected (<0.005%)

0.1% equals to 1000 mg/kg

According to client's request, tests are combination tests. The experimental results are the total result of mixed samples.

\*\*\*END OF THE REPORT\*\*\*