TEST REPORT

Applicant	:	ningbo deli tools co., ltd.
Address	:	No.128 Chezhan West Road, Huangtan Town, NinghaiCounty, Ningbo, Zhejiang, China.
Sample description	:	Rotary Hammer
Item no.	:	DE-DC26-3E
Manufacturer	:	ningbo deli tools co., ltd.
Country of origin	:	China
Sample received date	:	25-Mar-2025
Further information date	:	30-Apr-2025
Turn around time	:	25-Mar-2025 To 06-May-2025
Test specification	:	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)
Conclusion	:	Based on the analysis on the selected components of the submitted product, 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 following test item(s) was/were performed on selected sample(s) and/or component(s) appointed by applicant.

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

Signed for and on behalf of
Eurofins MTS Consumer Product Testing (Shanghai) Co., Ltd.

Linda Jin
Chemical Division Assistant Manager SLTH

SAMPLE PHOTO(S)

EFW525036174-CG-04

TO BE CONTINUED

COMPONENT PHOTO(S)

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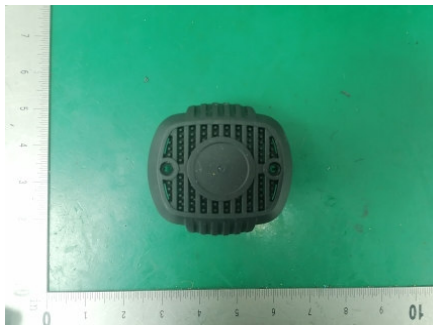

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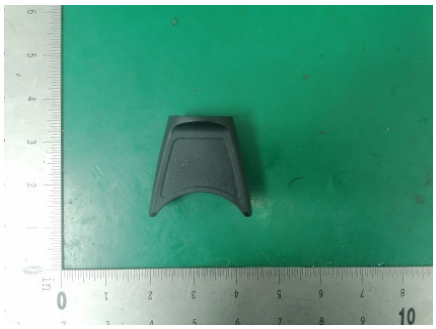

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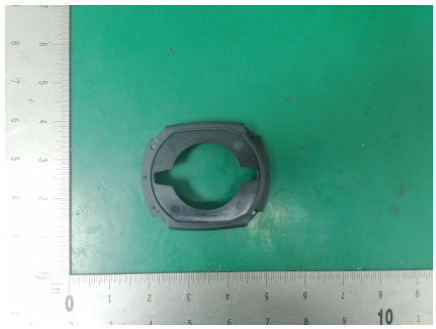

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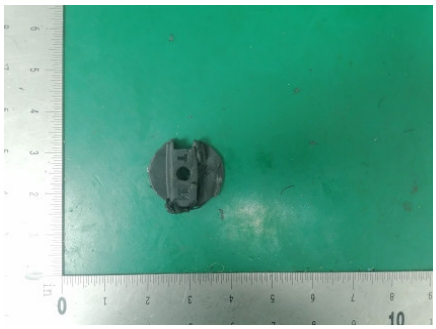

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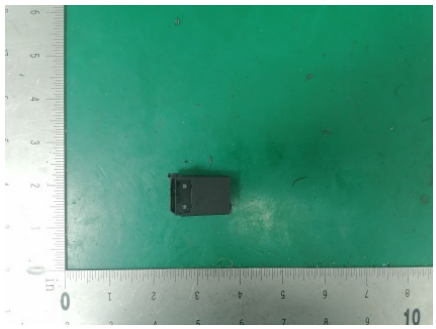

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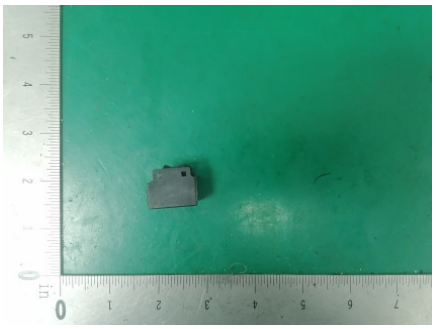

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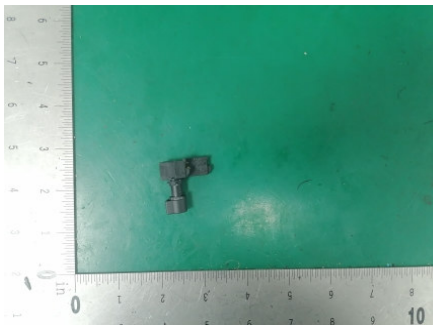

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COMPONENT PHOTO(S)

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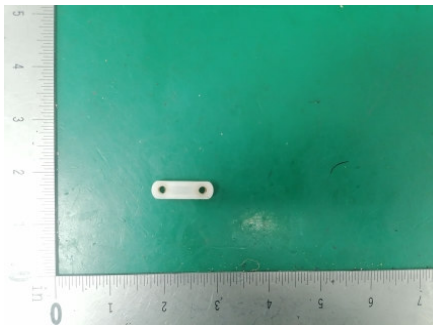

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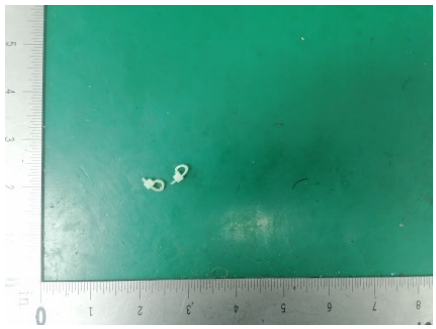

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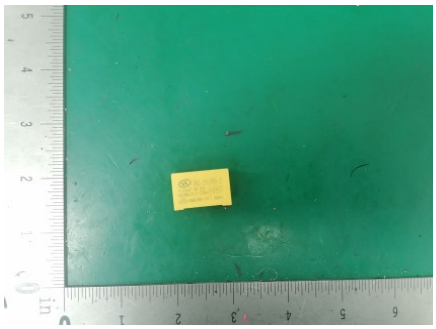

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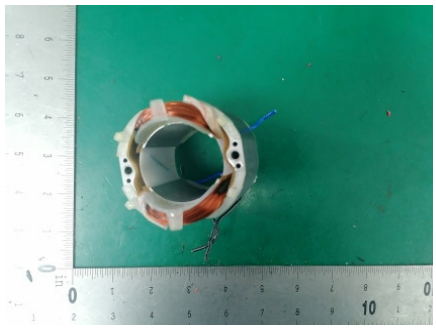

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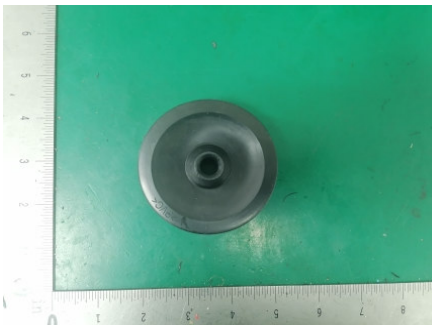

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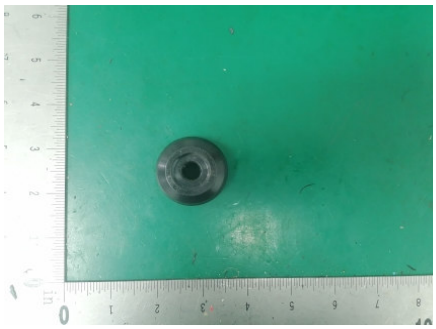

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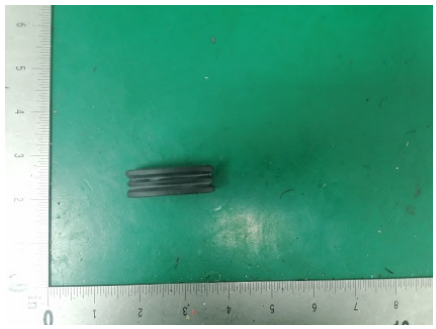

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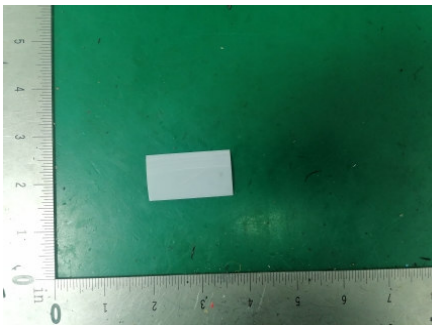

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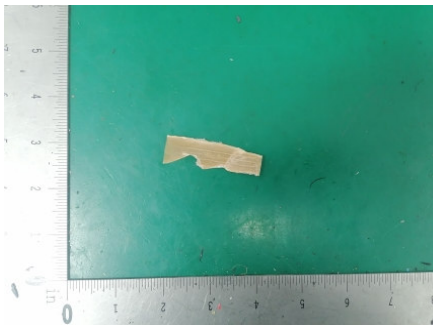

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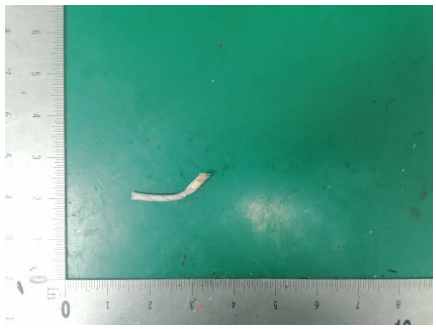

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COMPONENT PHOTO(S)

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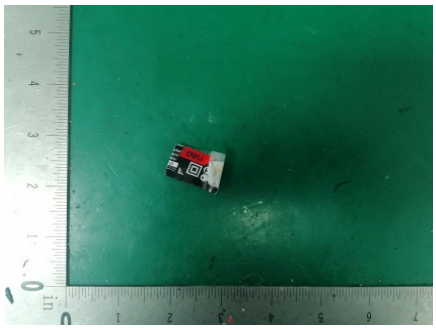

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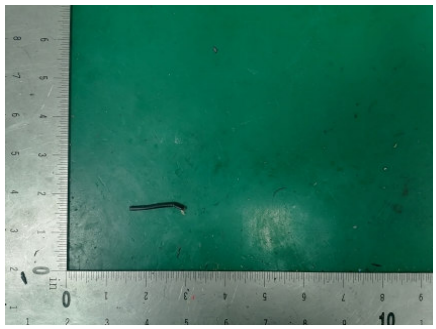

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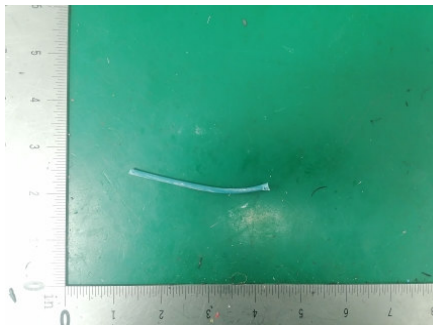

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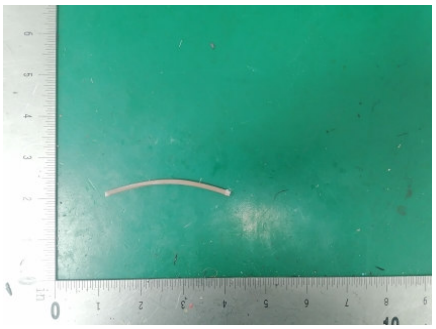

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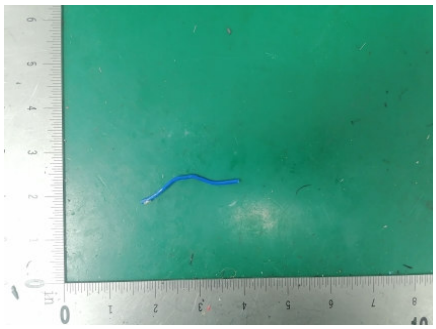

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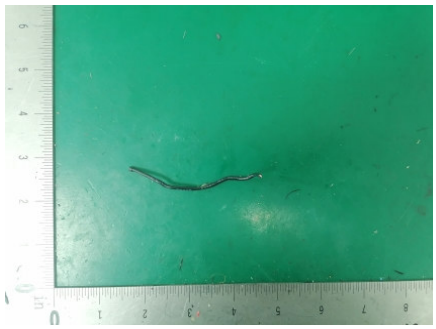

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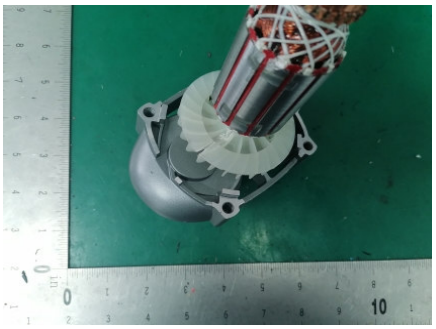

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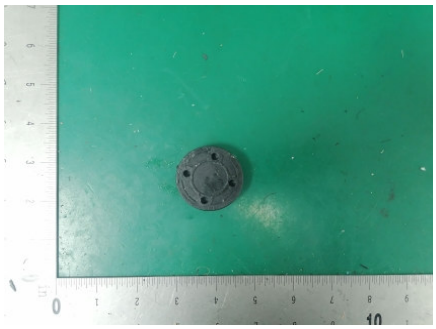

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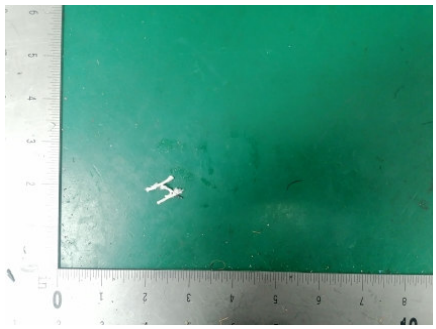

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COMPONENT PHOTO(S)

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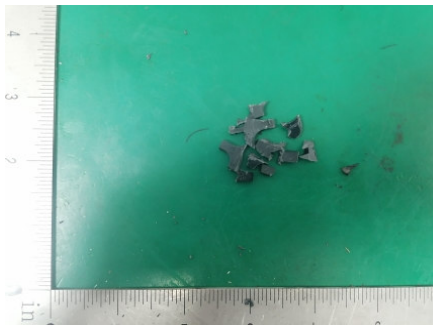

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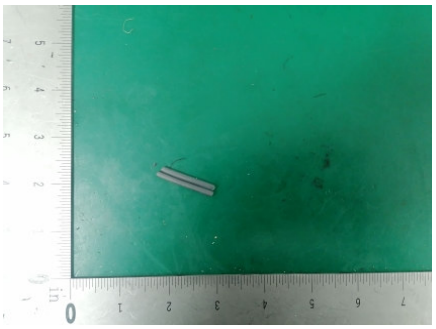

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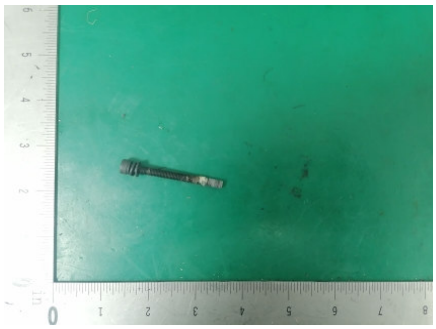

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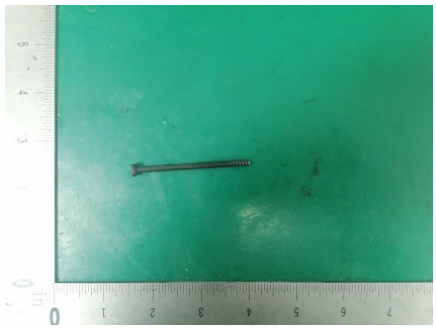

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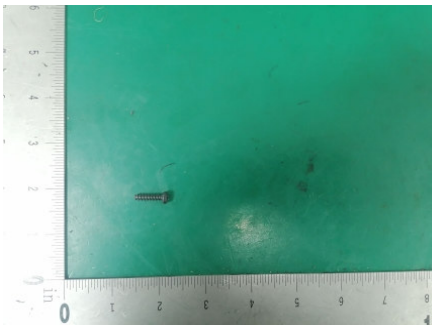

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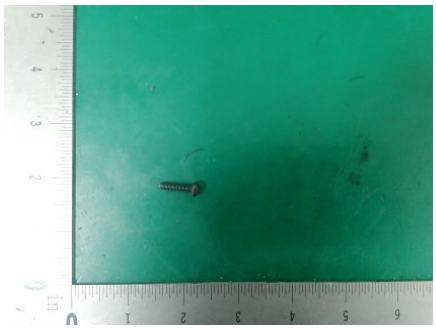

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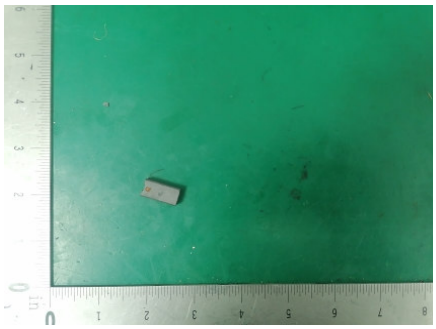

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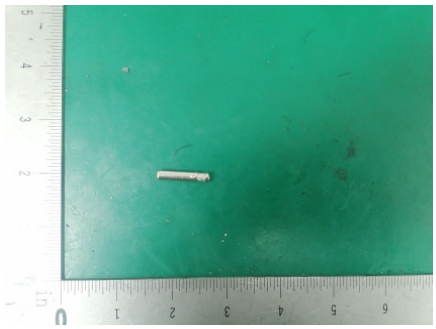

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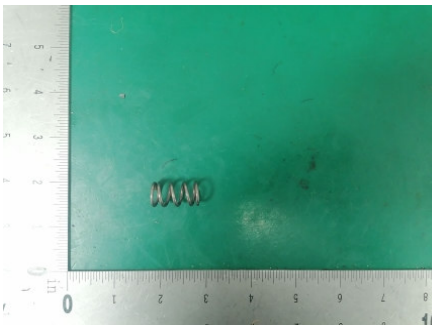

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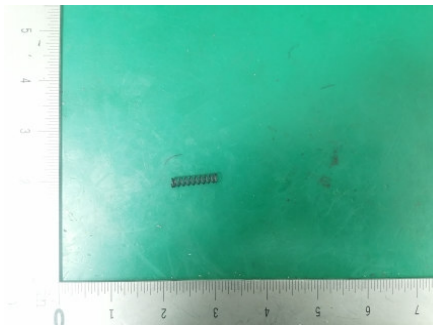

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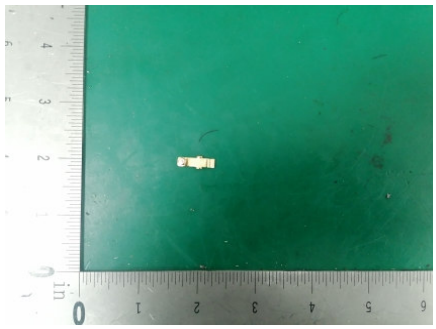

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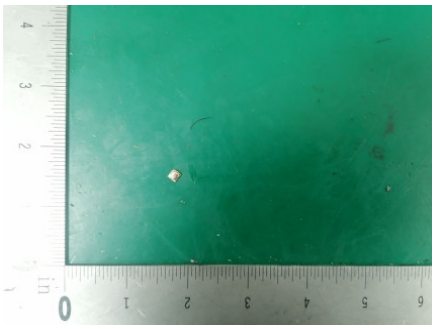

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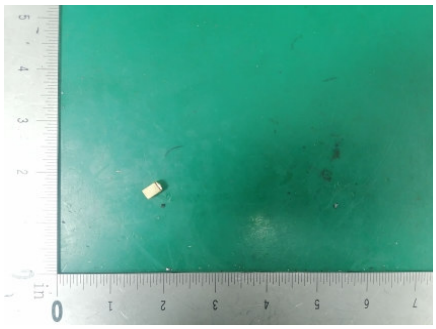

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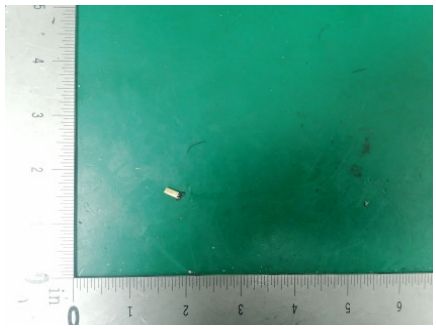

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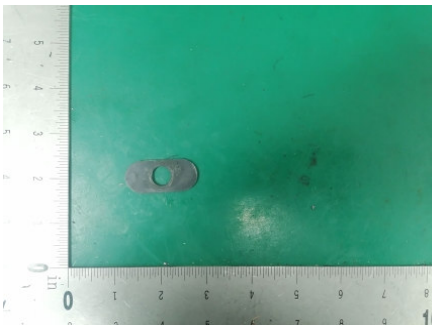

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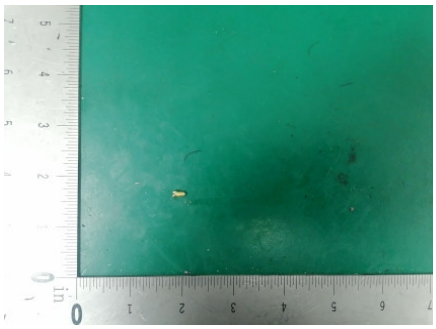

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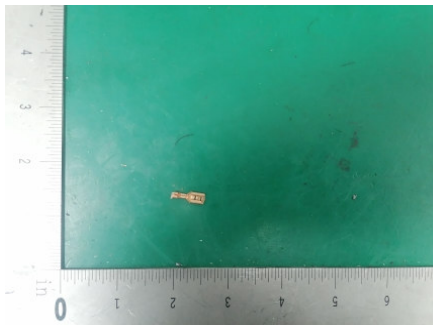

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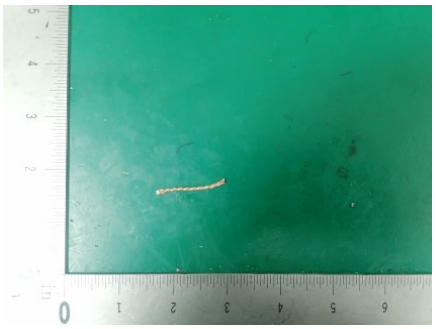

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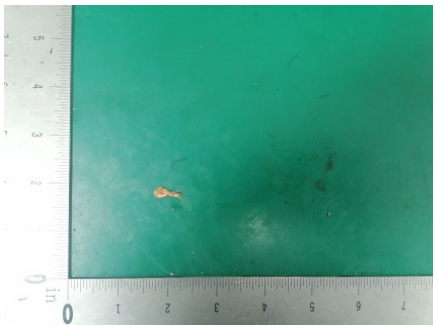

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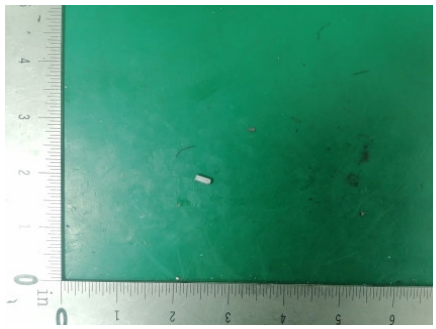

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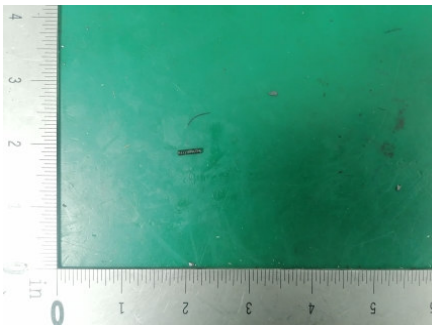
COMPONENT PHOTO(S)



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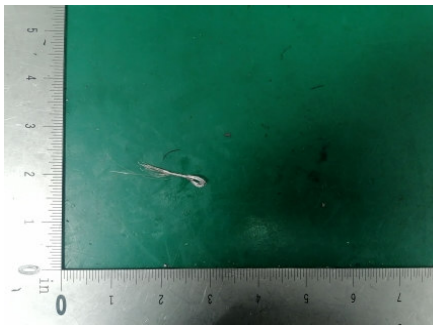

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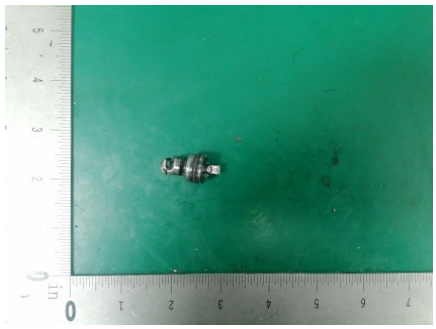

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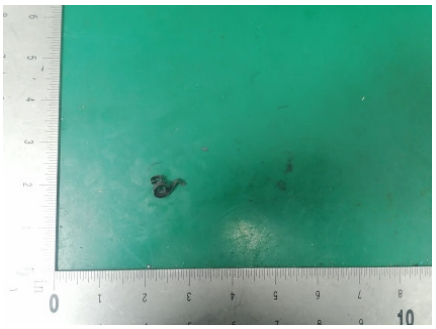

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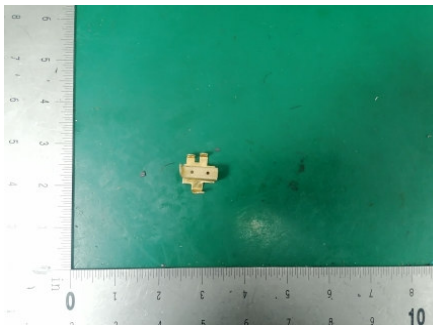

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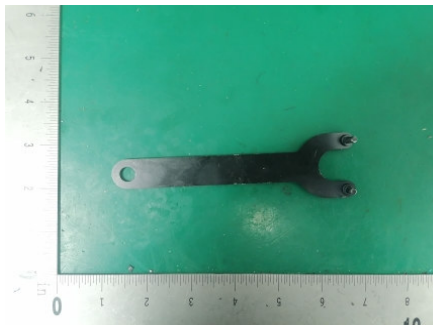

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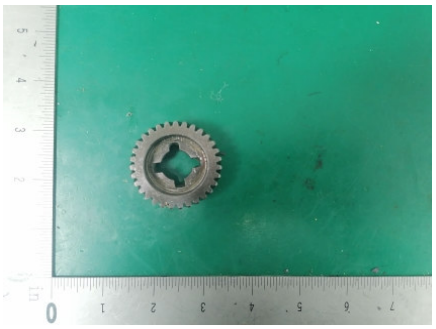

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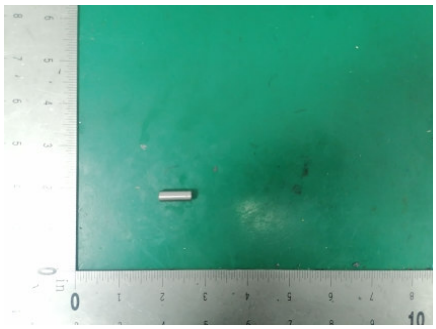

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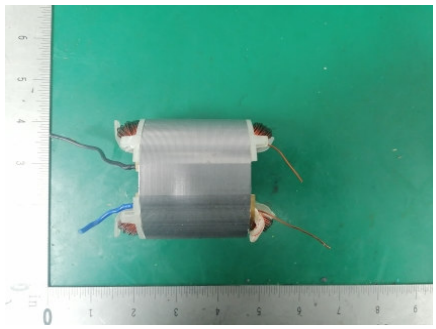

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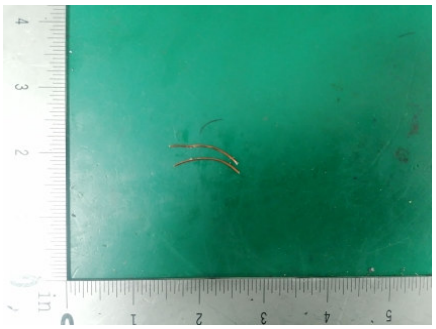

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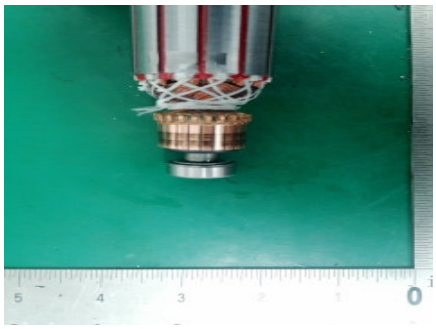

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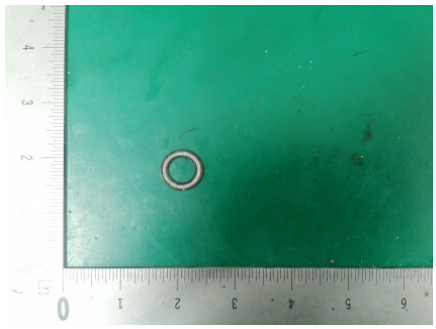

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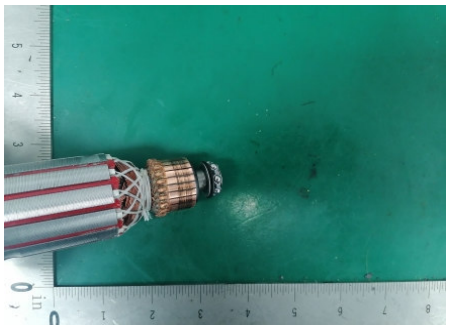
TO BE CONTINUED

COMPONENT PHOTO(S)



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TO BE CONTINUED

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	Black plastic 1	BL	BL	BL	BL	BL
2	Black plastic 2	BL	BL	BL	BL	NC
3	Black plastic 3	BL	BL	BL	BL	BL
4	Black plastic 4	BL	BL	BL	BL	BL
5	Black plastic 5	BL	BL	BL	BL	BL
6	Black plastic 6	BL	BL	BL	BL	BL
7	Black plastic 7	BL	BL	BL	BL	BL
8	Black plastic 8	BL	BL	BL	BL	NC
9	Black plastic 9	BL	BL	BL	BL	NC
10	Black plastic 10	BL	BL	BL	BL	NC
11	Black plastic 11	BL	BL	BL	BL	NC
12	Black plastic 12	BL	BL	BL	BL	BL
13	Black plastic 13	BL	BL	BL	BL	BL
14	White plastic buckle	BL	BL	BL	BL	BL
15	White plastic cable tie	BL	BL	BL	BL	BL
16	Red plastic	BL	BL	BL	BL	BL
17	Yellow electrical components	BL	BL	BL	BL	NC
18	Translucent plastic	BL	BL	BL	BL	BL
19	Black plastic 14	BL	BL	BL	BL	BL
20	Black plastic 15	BL	BL	BL	BL	BL
21	Black plastic 16	BL	BL	BL	BL	BL
22	White plastic sheet	BL	BL	BL	BL	BL
23	Light brown soft plastic	BL	BL	BL	BL	BL
24	Translucent insulation sleeve	BL	BL	BL	BL	BL
25	White line	BL	BL	BL	BL	BL
26	White soft plastic tape color printing	BL	BL	BL	BL	BL
27	Black soft plastic insulation sleeve	BL	BL	BL	BL	BL
28	Black Soft Plastic	BL	BL	BL	BL	BL
29	Black soft plastic wrapped wire leather	BL	BL	BL	BL	BL
30	Green soft plastic wire sheath	BL	BL	BL	BL	BL
31	Brown soft plastic wire sheath	BL	BL	BL	BL	BL
32	Blue soft plastic wire sheath	BL	BL	BL	BL	BL
33	Black soft plastic wire sheath	BL	BL	BL	BL	BL
34	Translucent plastic (motor)	BL	BL	BL	BL	BL
35	Black Soft Plastic	BL	BL	BL	BL	BL
36	White fabric woven rope	BL	BL	BL	BL	BL
37	Yellow lubricating oil	BL	BL	BL	BL	BL
38	Black soft plastic plug	BL	BL	BL	BL	BL
39	Black plastic inside the plug	BL	BL	BL	BL	NC

TO BE CONTINUED

TEST RESULT

No.	Component	Test Results (mg/kg)				
		Cd	Pb	Hg	Cr	Br
		Limit (mg/kg)				
		100	1000	1000	Cr(VI): 1000	PBB:1000 PBDE:1000
40	Grey Soft Plastic	BL	BL	BL	BL	BL
41	Black metal screw 1	BL	BL	BL	NC	NA
42	Black metal screw 2	BL	BL	BL	NC	NA
43	Black metal screw 3	BL	BL	BL	NC	NA
44	Black metal screw 4	BL	BL	BL	NC	NA
45	Grey black metal	BL	BL	BL	NC	NA
46	Silver metal body	BL	BL	BL	NC	NA
47	Black carbon block	BL	BL	BL	BL	BL
48	Silver metal plug	BL	$1.05x10^4$ (*2)	BL	BL	NA
49	Silver metal spring	BL	BL	BL	NC	NA
50	Black metal spring 1	BL	BL	BL	NC	NA
51	Silver metal sheet	BL	BL	BL	BL	NA
52	Silver metal contacts	BL	BL	BL	BL	NA
53	Golden metal block	BL	$1.90x10^4$ (*2)	BL	BL	NA
54	Golden metal connector	BL	BL	BL	BL	NA
55	Black metal sheet	BL	BL	BL	BL	NA
56	Golden metal screw	BL	BL	BL	BL	NA
57	Bronze colored metal plug	BL	BL	BL	BL	NA
58	Copper wire 1	BL	BL	BL	BL	NA
59	Copper wire 2	BL	BL	BL	BL	NA
60	Silver metal cap	BL	BL	BL	NC	NA
61	Black metal spring 2	BL	BL	BL	NC	NA
62	Silver metal wire	BL	BL	BL	BL	NA
63	Silver metal block	BL	BL	BL	NC	NA
64	Black metal sheet 2	BL	BL	BL	BL	NA
65	Golden metal sheet	BL	BL	BL	BL	NA
66	Black metal wrench	BL	BL	BL	BL	NA
67	Grey black metal gear	BL	BL	BL	NC	NA
68	Silver metal shaft	BL	BL	BL	NC	NA
69	Silver metal (motor)	BL	BL	BL	NC	NA
70	Copper wire 3	BL	BL	BL	BL	NA
71	Silver metal bearings	BL	BL	BL	NC	NA
72	Silver metal ring	BL	BL	BL	BL	NA
73	Copper sheet	BL	BL	BL	BL	NA
74	Silver metal block 2	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 ≤(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	/	BL ≤ (250-3σ) ＜ X
Cr	BL ≤ (700-3σ) ＜X	BL ≤ (700-3σ) ＜X	BL≤(500-3σ) ＜X

Note:
BL= Below limit
X = The region where further investigation is necessary
OL = Over limit
3σ = The repeatability of the analyzer at the action level
LOD = Limit of detection

(*2) As a copper alloy containing up to 4% lead by weight (RoHS Exemption 6(c)).

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	0.01μg/cm^2
	IEC 62321-7-2:2017		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)
41	Negative
42	Negative
43	Negative
44	Negative
45	Negative
46	Negative
49	Negative
50	Negative
60	Negative
61	Negative
63	Negative
67	Negative
68	Negative
69	Negative
71	Negative
74	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 0.10μg/cm^2.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
2	-	-	-	-	ND	ND
8	-	-	-	-	ND	ND
9	-	-	-	-	ND	ND
10	-	-	-	-	ND	ND
11	-	-	-	-	ND	ND
17	-	-	-	-	ND	ND
39	-	-	-	-	ND	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
$\mu g/cm^2$ = 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	0.010	ND	ND
22+23+24	ND	0.007	ND	ND
37	0.025	0.094	ND	0.099
38+39+40	ND	0.010	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.
As per client's request, only the appointed materials have been tested.

END OF THE REPORT