

**Report No.:** 48249561a 001

Page 1 of 17

**Client:** China Pneumatic Corporation  
No. 16, Ziqiang 1st Rd., Zhongli Dist., Taoyuan City 32063, Taiwan, R.O.C.

**Test item(s):** Torque Controller

**Identification/Model No(s):** TCA Series, TCB Series, TCC Series

**Sample obtaining method:** Sending by customer

**Condition at delivery:** Test item complete and undamaged.

**Sample receiving date:** 2024-06-25

**Testing period:** 2024-06-25 – 2024-07-23

**Place of testing:** TÜV Rheinland Hong Kong Ltd.

**Test specification:**

According to RoHS (recast): Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment, 2011/65/EU Annex II and its amendment Directive (EU) 2015/863: Total Content of Lead, Cadmium, Mercury, Chromium VI, Polybrominated Biphenyls, Polybrominated Diphenyl Ethers; and Benzylbutyl phthalate (BBP), Dibutyl phthalate (DBP), Bis(2-ethylhexyl) phthalate (DEHP), Diisobutyl phthalate (DIBP)

**Test result:**

Pass

**Other information:** According to the client's email declaration dated on 02.07.2024, the only differences between individual series are the dimensions of the metal shaft and outer casing, with this part being consistent in color and material.

For and on behalf of  
TÜV Rheinland Taiwan Ltd.



Arthur Cheng/Project Manager  
Name/Position



2024-07-23  
Date

*Sample information is provided by customer. Test result is drawn according to the kind and extent of tests performed. This test report relates to the above mentioned test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products. "Decision Rule" document announced in our website (<https://www.tuv.com/landingpage/en/qm-gcn/>) describes the statement of conformity and its rule of enforcement for test results are applicable throughout this test report..*

Test Report No.: 48249561a 001

Page 2 of 17

**Material List:**

Lab no.: TCL240625-01

Mat. No.	Material	Color	Location
1	Metal	black	Photo1
2	Metal	metallic	Photo1
3	Metal	red	Photo2
4	Metal	metallic	Photo2
5	Plastic	black	Photo2
6	Plastic	black	Photo2
7	Metal	golden	Photo3
8	Metal	metallic	Photo3
9	Metal	metallic	Photo3
10	Plastic	red	Photo3
11	Plastic	black	Photo3
12	Plastic	black	Photo3
13	Plastic	red	Photo3
14	Metal	metallic	Photo3
15	Metal	copper	Photo4
16	Metal	black	Photo4
17	Metal + plating	red / white	Photo4
18	Metal	metallic	Photo5
19	Metal	metallic	Photo5
20	PCB board	green	Photo6
21	PCB board	green	Photo6
22	Plastic	white	Photo6
23	Plastic	white	Photo6
24	Electronic components	black	Photo6
25	Electronic components	black	Photo6
26	Electronic components	black	Photo6
27	Electronic components	orange-brown	Photo6
28	Metal	Metallic	Photo6
29	Plastic	red	Photo6
30	Metal	metallic	Photo6
31	Metal	metallic	Photo6
32	Electronic components	metallic	Photo6
33	Metal	metallic	Photo6
34	Metal	copper	Photo7
35	Plastic	white	Photo7
36	Plastic	grey	Photo7
37	Plastic	black	Photo7
38	Plastic	translucent	Photo7
39	Plastic	black	Photo7
40	Plastic	grey	Photo7
41	Metal	blue	Photo8
42	Metal	metallic	Photo8
43	Metal	metallic	Photo8
44	Plastic	black	Photo28
45	Metal	metallic	Photo8
46	Plastic	black	Photo8
47	Elastomer	black	Photo9

Mat. No.	Material	Color	Location
48	Plastic	black	Photo10
49	Metal	metallic	Photo10
50	Metal	copper	Photo10
51	Metal	metallic	Photo10
52	Metal coated elastomer	black	Photo10
53	Metal	metallic	Photo10
54	Plastic	black / yellow	Photo11
55	Metal	metallic	Photo11
56	Plastic	green	Photo11
57	Electronic components	metallic	Photo11
58	Metal	metallic	Photo12
59	Metal	copper	Photo12
60	Plastic	black	Photo12
61	Metal	metallic	Photo12
62	Metal	metallic	Photo12
63	Metal	metallic	Photo13
64	Metal	metallic	Photo13
65	Plastic	black	Photo13
66	Metal	metallic	Photo13
67	Metal	black	Photo13
68	Metal	metallic	Photo13
69	Plastic	black	Photo13
70	Metal	copper	Photo13
71	Metal	metallic	Photo13
72	Plastic	yellow	Photo13
73	Elastomer	black	Photo13
74	Metal	black	Photo14
75	Metal	metallic	Photo14
76	Plastic	blue	Photo15
77	Plastic	blue	Photo15
78	Plastic	green	Photo28
79	Plastic	red-white	Photo16
80	Plastic	red	Photo16
81	Plastic	black	Photo17
82	Metal	metallic	Photo17
83	Metal	golden	Photo17
84	Plastic	white	Photo18
85	Plastic	black	Photo19
86	Metal	metallic	Photo19
87	Plastic	red	Photo19
88	Plastic	black	Photo20
89	Plastic	green	Photo20
90	Plastic	orange-yellow	Photo20
91	Plastic	blue	Photo21
92	Plastic	purple	Photo22
93	Plastic	blue	Photo22
94	Plastic	orange-yellow	Photo22
95	Plastic	orange	Photo22
96	Plastic	red	Photo23

Mat. No.	Material	Color	Location
97	Plastic	black	Photo23
98	Plastic	white	Photo23
99	Plastic	black	Photo23
100	Plastic	black	Photo24
101	Plastic	green	Photo24
102	Plastic	white	Photo24
103	Plastic	black	Photo24
104	Plastic	black	Photo24
105	Metal	metallic	Photo24
106	Plastic	white	Photo25
107	Metal	copper	Photo25
108	Metal	metal	Photo26
109	Plastic	black	Photo26
110	Plastic	red	Photo27
111	Plastic	white	Photo27
112	Plastic	green	Photo27
113	Plastic	brown	Photo27
114	Plastic	black	Photo27
115	Plastic	blue	Photo28
116	Plastic	red	Photo28
117	Plastic	brown	Photo28

Remark:

1. Component(s)/ materials(s) with an area of less than 2mm x 2mm or insufficient weight will not be selected for testing according to RoHS Directive 2011/65/EU due to technical reason.
2. For the test sample does not have detail materials information provided by client, visually identical materials (e.g. wire insulation, solder points, etc.) will be considered as the same material.
3. Solder points on a printing circuit board will be examined several times based on optical anomalies or discoloration of the solder point(s) unless the solder point(s) is obviously generated automatically during production.
4. All other materials will be sampled and tested at one test point representatively.
5. The tested parts were selected by the client.

Test sample



**Material Photo**



Photo1

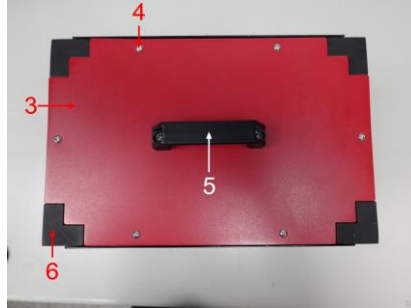


Photo2



Photo3



Photo4



Photo5

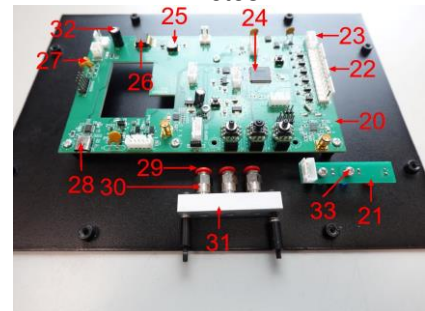


Photo6

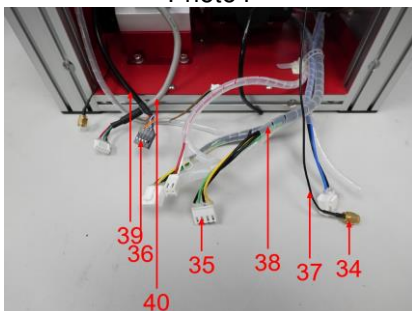


Photo7

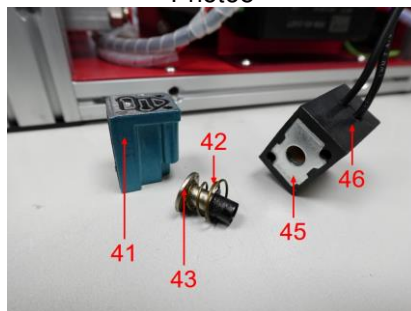


Photo8

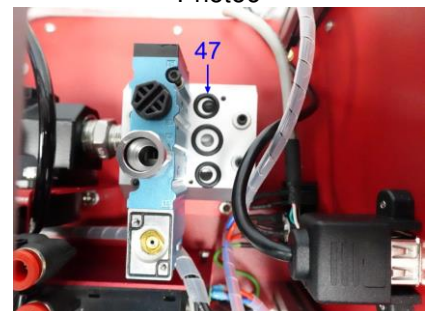


Photo9



Photo10

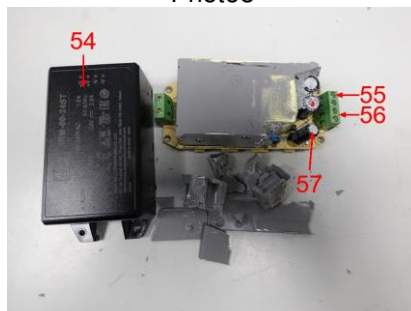


Photo11

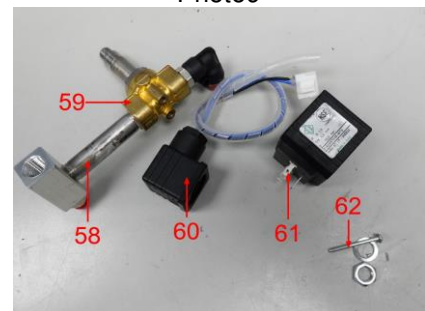


Photo12

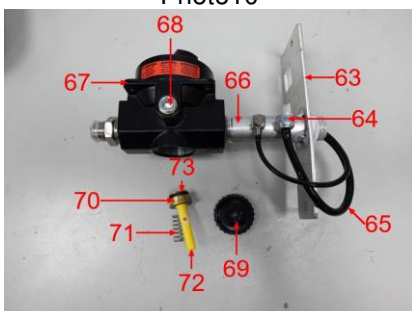


Photo13

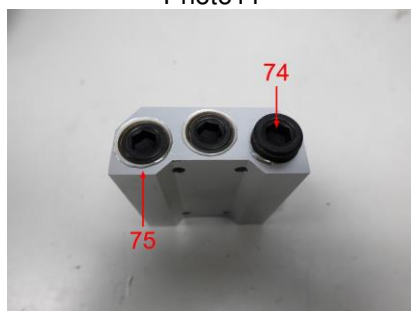


Photo14

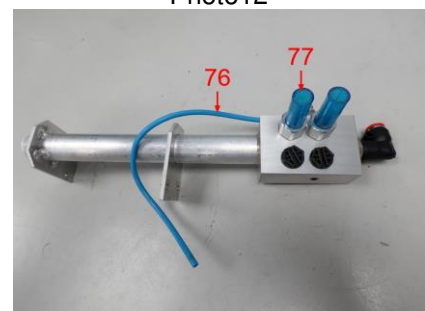


Photo15



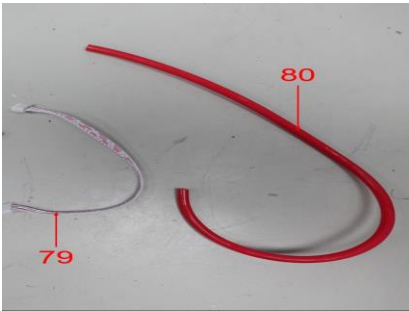


Photo16

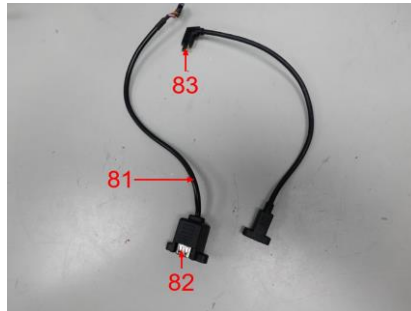


Photo17

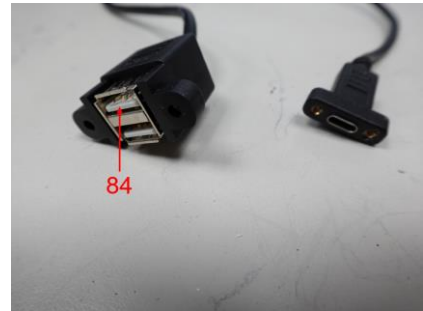


Photo18



Photo19

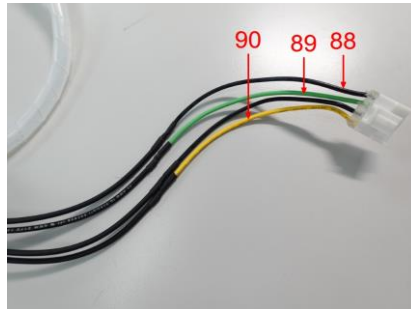


Photo20

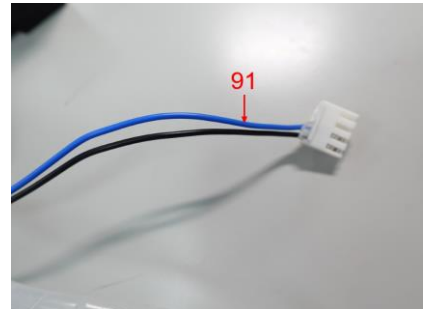


Photo21

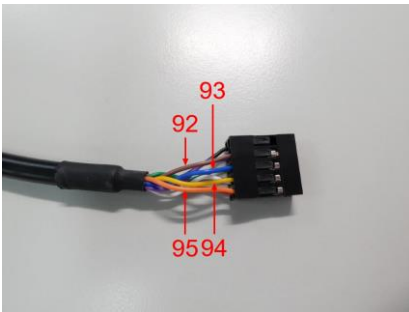


Photo22

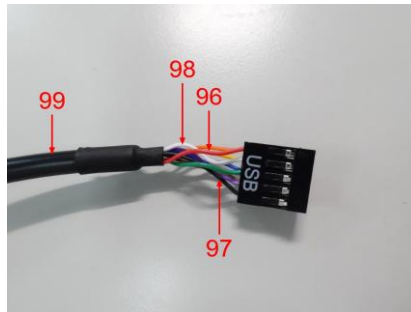


Photo23

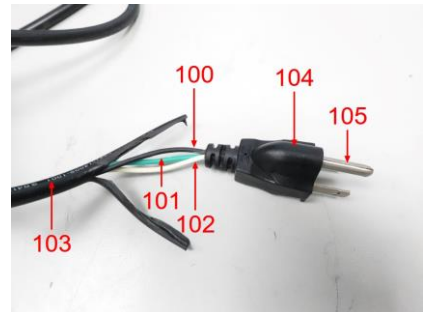


Photo24



Photo25



Photo26

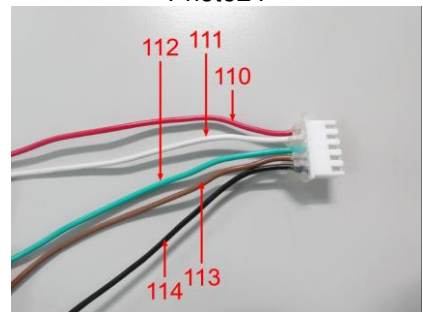


Photo27

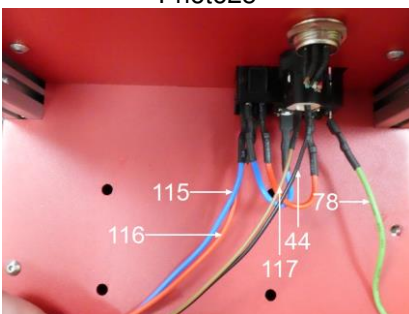
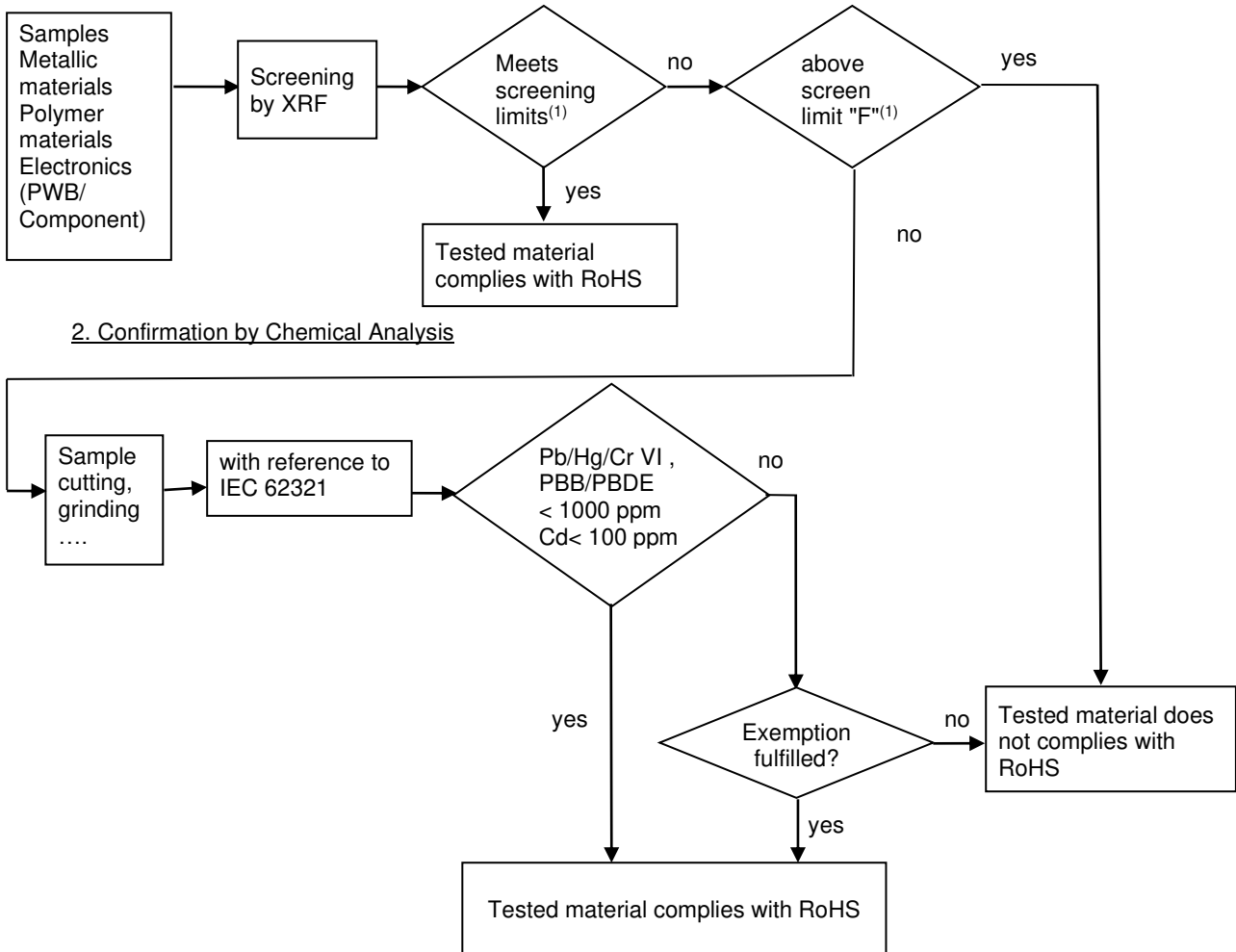


Photo28

Testing procedure:

1. Screening by X-RAY Fluorescence Spectrometry (XRF)



Test Method : Cadmium, Lead, Mercury, Chromium, Bromine  
With reference to IEC 62321-3-1:2013

### 1. Screening by X-Ray Fluorescence Spectrometry (XRF)

Sample No.		1	2	3	4
Cadmium (Cd)	[mg/kg]	BL	BL	BL	BL
Lead (Pb)	[mg/kg]	BL	BL	BL	BL
Mercury (Hg)	[mg/kg]	BL	BL	BL	BL
Chromium (Cr)	[mg/kg]	BL	BL	BL	d(*1)
Bromine (Br)	[mg/kg]	n.a.	n.a.	n.a.	n.a.

Sample No.		5	6	7	8
Cadmium (Cd)	[mg/kg]	BL	BL	BL	BL
Lead (Pb)	[mg/kg]	BL	BL	d(*1)	d(*1)
Mercury (Hg)	[mg/kg]	BL	BL	BL	BL
Chromium (Cr)	[mg/kg]	BL	BL	BL	BL
Bromine (Br)	[mg/kg]	d(*1)	BL	n.a.	n.a.

Sample No.		9	10	11	12
Cadmium (Cd)	[mg/kg]	BL	BL	BL	BL
Lead (Pb)	[mg/kg]	BL	BL	BL	BL
Mercury (Hg)	[mg/kg]	BL	BL	BL	BL
Chromium (Cr)	[mg/kg]	BL	BL	BL	BL
Bromine (Br)	[mg/kg]	n.a.	BL	BL	BL

Sample No.		13	14	15	16
Cadmium (Cd)	[mg/kg]	BL	BL	BL	BL
Lead (Pb)	[mg/kg]	BL	BL	BL	BL
Mercury (Hg)	[mg/kg]	BL	BL	BL	BL
Chromium (Cr)	[mg/kg]	BL	BL	BL	BL
Bromine (Br)	[mg/kg]	BL	n.a.	n.a.	n.a.

Sample No.		17	18	19	20
Cadmium (Cd)	[mg/kg]	BL	BL	BL	BL
Lead (Pb)	[mg/kg]	BL	d(*1)	BL	BL
Mercury (Hg)	[mg/kg]	BL	BL	BL	BL
Chromium (Cr)	[mg/kg]	BL	BL	d(*1)	BL
Bromine (Br)	[mg/kg]	BL	n.a.	n.a.	d(*1)



Sample No.		21	22	23	24
Cadmium (Cd)	[mg/kg]	BL	BL	BL	BL
Lead (Pb)	[mg/kg]	BL	BL	BL	BL
Mercury (Hg)	[mg/kg]	BL	BL	BL	BL
Chromium (Cr)	[mg/kg]	BL	BL	BL	BL
Bromine (Br)	[mg/kg]	d(*1)	BL	BL	BL

Sample No.		25	26	27	28
Cadmium (Cd)	[mg/kg]	BL	BL	BL	BL
Lead (Pb)	[mg/kg]	BL	d(*1)	BL	BL
Mercury (Hg)	[mg/kg]	BL	BL	BL	BL
Chromium (Cr)	[mg/kg]	BL	BL	BL	d(*1)
Bromine (Br)	[mg/kg]	BL	BL	BL	n.a.

Sample No.		29	30	31	32
Cadmium (Cd)	[mg/kg]	BL	BL	BL	BL
Lead (Pb)	[mg/kg]	BL	d(*1)	BL	BL
Mercury (Hg)	[mg/kg]	BL	BL	BL	BL
Chromium (Cr)	[mg/kg]	BL	BL	BL	BL
Bromine (Br)	[mg/kg]	BL	n.a.	n.a.	BL

Sample No.		33	34	35	36
Cadmium (Cd)	[mg/kg]	BL	BL	BL	BL
Lead (Pb)	[mg/kg]	BL	d(*1)	BL	BL
Mercury (Hg)	[mg/kg]	BL	BL	BL	BL
Chromium (Cr)	[mg/kg]	BL	BL	BL	BL
Bromine (Br)	[mg/kg]	n.a.	n.a.	BL	BL

Sample No.		37	38	39	40
Cadmium (Cd)	[mg/kg]	BL	BL	BL	BL
Lead (Pb)	[mg/kg]	BL	BL	BL	BL
Mercury (Hg)	[mg/kg]	BL	BL	BL	BL
Chromium (Cr)	[mg/kg]	BL	BL	BL	BL
Bromine (Br)	[mg/kg]	BL	BL	BL	BL

Sample No.		41	42	43	44
Cadmium (Cd)	[mg/kg]	BL	BL	BL	BL
Lead (Pb)	[mg/kg]	d(*1)	BL	BL	BL
Mercury (Hg)	[mg/kg]	BL	BL	BL	BL
Chromium (Cr)	[mg/kg]	BL	d(*1)	BL	BL
Bromine (Br)	[mg/kg]	n.a.	n.a.	n.a.	BL

Sample No.		45	46	47	48
Cadmium (Cd)	[mg/kg]	BL	BL	BL	BL
Lead (Pb)	[mg/kg]	BL	BL	BL	BL
Mercury (Hg)	[mg/kg]	BL	BL	BL	BL
Chromium (Cr)	[mg/kg]	d(*1)	BL	BL	BL
Bromine (Br)	[mg/kg]	n.a.	d(*1)	BL	BL

Sample No.		49	50	51	52
Cadmium (Cd)	[mg/kg]	BL	BL	BL	BL
Lead (Pb)	[mg/kg]	BL	BL	BL	BL
Mercury (Hg)	[mg/kg]	BL	BL	BL	BL
Chromium (Cr)	[mg/kg]	BL	BL	BL	BL
Bromine (Br)	[mg/kg]	n.a.	n.a.	n.a.	BL

Sample No.		53	54	55	56
Cadmium (Cd)	[mg/kg]	BL	BL	BL	BL
Lead (Pb)	[mg/kg]	BL	BL	BL	BL
Mercury (Hg)	[mg/kg]	BL	BL	BL	BL
Chromium (Cr)	[mg/kg]	BL	BL	BL	BL
Bromine (Br)	[mg/kg]	n.a.	BL	n.a.	BL

Sample No.		57	58	59	60
Cadmium (Cd)	[mg/kg]	BL	BL	BL	BL
Lead (Pb)	[mg/kg]	BL	BL	d(*1)	BL
Mercury (Hg)	[mg/kg]	BL	BL	BL	BL
Chromium (Cr)	[mg/kg]	BL	d(*1)	BL	BL
Bromine (Br)	[mg/kg]	BL	n.a.	n.a.	d(*1)

Sample No.		61	62	63	64
Cadmium (Cd)	[mg/kg]	BL	BL	BL	BL
Lead (Pb)	[mg/kg]	BL	BL	BL	BL
Mercury (Hg)	[mg/kg]	BL	BL	BL	BL
Chromium (Cr)	[mg/kg]	BL	d(*1)	BL	BL
Bromine (Br)	[mg/kg]	n.a.	n.a.	n.a.	n.a.

Sample No.		65	66	67	68
Cadmium (Cd)	[mg/kg]	BL	BL	BL	BL
Lead (Pb)	[mg/kg]	BL	BL	BL	BL
Mercury (Hg)	[mg/kg]	BL	BL	BL	BL
Chromium (Cr)	[mg/kg]	BL	BL	BL	BL
Bromine (Br)	[mg/kg]	BL	n.a.	n.a.	n.a.

Sample No.		69	70	71	72
Cadmium (Cd)	[mg/kg]	BL	BL	BL	BL
Lead (Pb)	[mg/kg]	BL	d(*1)	BL	BL
Mercury (Hg)	[mg/kg]	BL	BL	BL	BL
Chromium (Cr)	[mg/kg]	BL	BL	d(*1)	BL
Bromine (Br)	[mg/kg]	BL	n.a.	n.a.	BL

Sample No.		73	74	75	76
Cadmium (Cd)	[mg/kg]	BL	BL	BL	BL
Lead (Pb)	[mg/kg]	BL	BL	BL	BL
Mercury (Hg)	[mg/kg]	BL	BL	BL	BL
Chromium (Cr)	[mg/kg]	BL	d(*1)	BL	BL
Bromine (Br)	[mg/kg]	BL	n.a.	n.a.	BL

Sample No.		77	78	79	80
Cadmium (Cd)	[mg/kg]	BL	BL	BL	BL
Lead (Pb)	[mg/kg]	BL	BL	BL	BL
Mercury (Hg)	[mg/kg]	BL	BL	BL	BL
Chromium (Cr)	[mg/kg]	BL	BL	BL	BL
Bromine (Br)	[mg/kg]	BL	BL	BL	BL

Sample No.		81	82	83	84
Cadmium (Cd)	[mg/kg]	BL	BL	BL	BL
Lead (Pb)	[mg/kg]	BL	BL	BL	BL
Mercury (Hg)	[mg/kg]	BL	BL	BL	BL
Chromium (Cr)	[mg/kg]	BL	BL	d(*1)	BL
Bromine (Br)	[mg/kg]	BL	n.a.	n.a.	d(*1)

Sample No.		85	86	87	88
Cadmium (Cd)	[mg/kg]	BL	BL	BL	BL
Lead (Pb)	[mg/kg]	BL	d(*1)	BL	BL
Mercury (Hg)	[mg/kg]	BL	BL	BL	BL
Chromium (Cr)	[mg/kg]	BL	BL	BL	BL
Bromine (Br)	[mg/kg]	BL	n.a.	BL	BL

Sample No.		89	90	91	92
Cadmium (Cd)	[mg/kg]	BL	BL	BL	BL
Lead (Pb)	[mg/kg]	BL	BL	BL	BL
Mercury (Hg)	[mg/kg]	BL	BL	BL	BL
Chromium (Cr)	[mg/kg]	BL	BL	BL	BL
Bromine (Br)	[mg/kg]	BL	BL	BL	BL

Sample No.		93	94	95	96
Cadmium (Cd)	[mg/kg]	BL	BL	BL	BL
Lead (Pb)	[mg/kg]	BL	BL	BL	BL
Mercury (Hg)	[mg/kg]	BL	BL	BL	BL
Chromium (Cr)	[mg/kg]	BL	BL	BL	BL
Bromine (Br)	[mg/kg]	BL	BL	BL	BL

Sample No.		97	98	99	100
Cadmium (Cd)	[mg/kg]	BL	BL	BL	BL
Lead (Pb)	[mg/kg]	BL	BL	BL	BL
Mercury (Hg)	[mg/kg]	BL	BL	BL	BL
Chromium (Cr)	[mg/kg]	BL	BL	BL	BL
Bromine (Br)	[mg/kg]	BL	BL	BL	BL

Sample No.		101	102	103	104
Cadmium (Cd)	[mg/kg]	BL	BL	BL	BL
Lead (Pb)	[mg/kg]	BL	BL	BL	BL
Mercury (Hg)	[mg/kg]	BL	BL	BL	BL
Chromium (Cr)	[mg/kg]	BL	BL	BL	BL
Bromine (Br)	[mg/kg]	BL	BL	BL	BL

Sample No.		105	106	107	108
Cadmium (Cd)	[mg/kg]	BL	BL	BL	BL
Lead (Pb)	[mg/kg]	BL	BL	BL	BL
Mercury (Hg)	[mg/kg]	BL	BL	BL	BL
Chromium (Cr)	[mg/kg]	BL	BL	BL	BL
Bromine (Br)	[mg/kg]	n.a.	BL	n.a.	n.a.

Sample No.		109	110	111	112
Cadmium (Cd)	[mg/kg]	BL	BL	BL	BL
Lead (Pb)	[mg/kg]	BL	BL	BL	BL
Mercury (Hg)	[mg/kg]	BL	BL	BL	BL
Chromium (Cr)	[mg/kg]	BL	BL	BL	BL
Bromine (Br)	[mg/kg]	BL	BL	BL	BL

Sample No.		113	114	115	116
Cadmium (Cd)	[mg/kg]	BL	BL	BL	BL
Lead (Pb)	[mg/kg]	BL	BL	BL	BL
Mercury (Hg)	[mg/kg]	BL	BL	BL	BL
Chromium (Cr)	[mg/kg]	BL	BL	BL	BL
Bromine (Br)	[mg/kg]	BL	BL	BL	BL

Sample No.		117	118	119
Cadmium (Cd)	[mg/kg]	BL	BL	BL
Lead (Pb)	[mg/kg]	BL	BL	BL
Mercury (Hg)	[mg/kg]	BL	BL	BL
Chromium (Cr)	[mg/kg]	BL	BL	BL
Bromine (Br)	[mg/kg]	BL	BL	BL

Notes:

- BL = Below limit
- OL = Over limit
- d. = detected
- n.a. = Not applicable
- mg/kg = milligram per kilogram
- <sup>1)</sup> The screening result was detected in the inconclusive region or over limits, thus the further wet chemistry tests are suggested.

Remark:

XRF Screening limits for different matrices :

Materials	Concentration (mg/kg)				
	Cd	Cr	Pb	Hg	Br
<b>Polymeric</b>	BL≤60<X<140≤OL	BL≤640<X	BL≤670<X<1330≤OL	BL≤660<X<1340≤OL	BL≤290<X
<b>Metallic</b>	BL≤60<X<140≤OL	BL≤640<X	BL≤670<X<1330≤OL	BL≤660<X<1340≤OL	n.a.
<b>Composite materials</b>	BL≤40<X<160≤OL	BL≤440<X	BL≤470<X<1530≤OL	BL≤460<X<1540≤OL	BL≤240<X

\* The symbol "X" marks the region where further investigation is necessary.



Test Report No.: 48249561a 001

Page 14 of 17

Test Method : Total Cadmium, Lead, Mercury, Chromium  
 - Ref. to IEC 62321-4:2013 and IEC 62321-5:2013  
 Chromium (VI)  
 - For Metal material - Ref. to IEC 62321-7-1:2015  
 - For Polymer, Electronic material or others materials - Ref. to IEC 62321-7-2:2017  
 PBBs, PBDEs - Ref. to IEC 62321-6:2015

## 2. Confirmation by Chemical Analysis

Sample No.	RL	4	19	28	42
Chromium VI (Cr VI)* [µg/cm <sup>2</sup> ]	0.1	< RL	< RL	< RL	< RL

Sample No.	RL	45	58	62	71
Chromium VI (Cr VI)* [µg/cm <sup>2</sup> ]	0.1	< RL	< RL	< RL	< RL

Sample No.	RL	74	83
Chromium VI (Cr VI)* [µg/cm <sup>2</sup> ]	0.1	< RL	< RL

Material No.	RL	7	8	18	26
Lead (Pb) [mg/kg]	2	32500 <sup>1)</sup>	27300 <sup>1)</sup>	550	9540 <sup>1)</sup>

Material No.	RL	30	34	41	59
Lead (Pb) [mg/kg]	2	25400 <sup>1)</sup>	31200 <sup>1)</sup>	650	1640 <sup>1)</sup>

Material No.	RL	70	86
Lead (Pb) [mg/kg]	2	30400 <sup>1)</sup>	28600 <sup>1)</sup>

Sample No.	RL	5	20	21	46
PBBs [mg/kg]	5	< RL	< RL	< RL	< RL
PBDEs [mg/kg]	5	< RL	< RL	< RL	< RL

Sample No.	RL	60	84
PBBs [mg/kg]	5	< RL	< RL
PBDEs [mg/kg]	5	< RL	< RL

### Notes:

- < = less than
- RL = Reporting Limit
- mg/kg = milligram per kilogram
- <sup>1)</sup> Part is made of copper alloy; according to (EU) 2018/741 and Annex III 6(c) of directive 2011/65/EU, Lead as an alloying element in copper containing up to 4 % lead by weight is exempted from requirement. This exemption is declared by the report owner and shall be responsible for the future disputes if any.
- \* Once the total Cr content in metal/ plastic or electronic sample is found to be exceeded the limit, the Cr (VI) content will be confirmed with reference to IEC 62321-7-1:2015/ IEC 62321-7-2:2017

Test Report No.: 48249561a 001

Page 15 of 17

Chromium (VI) concentration	Qualitative result
<0.1µg/cm <sup>2</sup>	The sample is negative (-ve) for Cr(VI). The Cr(VI) concentration is below the limit of quantification. The coating is considered a non-Cr(VI) based coating.
≥0.1µg/cm <sup>2</sup> and ≤0.13 µg/cm <sup>2</sup>	The result is considered to be inconclusive. Unavoidable coating variations may influence the determination. Recommendation: if additional samples are available, perform a total of 3 trials to increase sampling surface area. Use the averaged result of the 3 trails for the final determination.
>0.13 µg/cm <sup>2</sup>	The sample is positive (+ve) for Cr(VI). Concentration is above the limit of quantification and the statistical margin of error. The sample coating is considered to contain Cr(VI).

	Cd	Cr(VI)	Pb	Hg	PBBs	PBDEs
<b>Maximum permissible Limit acc. to 2011/65/EU (mg/kg)</b>	100	1000	1000	1000	1000	1000

Test Report No.: 48249561a 001

Page 16 of 17

Test Method : BBP/DBP/DEHP/DIBP - Ref. to IEC 62321-8:2017

Sample No.		RL	5+6+10	11+12+13	22+23	20+21
Benzylbutylphthalate (BBP)	mg/kg	50	< RL	< RL	< RL	< RL
Dibutylphthalate (DBP)	mg/kg	50	< RL	< RL	< RL	< RL
Diethylhexylphthalate (DEHP)	mg/kg	50	< RL	< RL	< RL	< RL
Diisobutylphthalate (DIBP)	mg/kg	50	< RL	< RL	< RL	< RL

Sample No.		RL	29+48+54	35+36+37	38+39+40	47
Benzylbutylphthalate (BBP)	mg/kg	50	< RL	< RL	< RL	< RL
Dibutylphthalate (DBP)	mg/kg	50	< RL	< RL	< RL	70
Diethylhexylphthalate (DEHP)	mg/kg	50	< RL	< RL	< RL	220
Diisobutylphthalate (DIBP)	mg/kg	50	< RL	< RL	< RL	< RL

Sample No.		RL	52	56+60+69	65+76+77	72
Benzylbutylphthalate (BBP)	mg/kg	50	< RL	< RL	< RL	< RL
Dibutylphthalate (DBP)	mg/kg	50	< RL	< RL	< RL	< RL
Diethylhexylphthalate (DEHP)	mg/kg	50	< RL	< RL	< RL	< RL
Diisobutylphthalate (DIBP)	mg/kg	50	< RL	< RL	< RL	< RL

Sample No.		RL	78	80	79+81	88+89+90
Benzylbutylphthalate (BBP)	mg/kg	50	< RL	< RL	< RL	< RL
Dibutylphthalate (DBP)	mg/kg	50	690	< RL	310	< RL
Diethylhexylphthalate (DEHP)	mg/kg	50	< RL	< RL	< RL	< RL
Diisobutylphthalate (DIBP)	mg/kg	50	< RL	< RL	< RL	< RL

Sample No.		RL	84+85+87	91+92+93	94+95+96	97+98+99
Benzylbutylphthalate (BBP)	mg/kg	50	< RL	< RL	< RL	< RL
Dibutylphthalate (DBP)	mg/kg	50	< RL	< RL	< RL	< RL
Diethylhexylphthalate (DEHP)	mg/kg	50	< RL	< RL	< RL	< RL
Diisobutylphthalate (DIBP)	mg/kg	50	< RL	< RL	< RL	< RL

Sample No.		RL	100+101+102	103+104	106+109	110+112+111
Benzylbutylphthalate (BBP)	mg/kg	50	< RL	< RL	< RL	< RL
Dibutylphthalate (DBP)	mg/kg	50	50	50	200	< RL
Diethylhexylphthalate (DEHP)	mg/kg	50	< RL	< RL	< RL	60
Diisobutylphthalate (DIBP)	mg/kg	50	< RL	< RL	< RL	< RL

Sample No.		RL	113+114+115	116+117+44
Benzylbutylphthalate (BBP)	mg/kg	50	< RL	< RL
Dibutylphthalate (DBP)	mg/kg	50	50	190
Diethylhexylphthalate (DEHP)	mg/kg	50	< RL	< RL
Diisobutylphthalate (DIBP)	mg/kg	50	< RL	< RL

Notes:

- < = less than
- RL = Reporting Limit
- mg/kg = milligram per kilogram

	BBP	DBP	DEHP	DIBP
<b>Maximum permissible Limit acc. to (EU) 2015/863 (mg/kg)</b>	1000	1000	1000	1000

--- End of Test-Report ---