



**Technical Report No. 68.401.19.0423.01**  
**Dated 2019-03-11**

Client: Zhongshan Gentech Electric Appliance Co., Ltd.

Address: Donghe Road, Xiaoli District , Dongfeng Town , Zhongshan City, Guangdong, China

Attn.: Liao jumei

Sample Description: OVEN

Tested Model No.: JK48A02-RMLH

Ref. Model No.: See APPENDIX II

Sample Received Date: 2019-01-23, 2019-03-04

Test Period: From 2019-01-23 to 2019-02-30;  
From 2019-03-23 to 2019-03-05

Location of Testing: TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch

Purpose of examination: Verification of RoHS (Restriction of Hazardous Substances) directive 2011/65/EU and its amendment (EU) 2015/863 on submitted samples

Test Result: Refer to following page(s)

Remark: - The result relates only to the items tested.  
- The reference model(s) was declared by client.

TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch  
TÜV SÜD Group

Prepared by:

Sean Shen  
Project Handler



Reviewed by:

Scarlett Liang  
Designated Reviewer

This technical report may only be quoted in full. Any use for advertising purposes must be granted in writing. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production.

TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch  
TÜV SÜD Group  
Building 12&13, Zhiheng Wisdomland Business Park,  
Nantou Checkpoint road 2,  
Shenzhen 518052, P. R. China

Tel.: (86) 755 88286998  
Fax: (86) 755 88285299

**SUMMARY OF TEST RESULTS**


No.	Test Requested	Conclusion	Remarks
1.	Heavy Metal (Pb, Cd, Hg and Cr VI) Content	<b>PASS</b>	
2.	Polybrominated Biphenyls (PBBs) and Polybrominated Diphenyl Ethers (PBDEs) Content	<b>PASS</b>	
3.	Phthalates (DEHP, BBP, DBP and DIBP) Content	<b>PASS</b>	




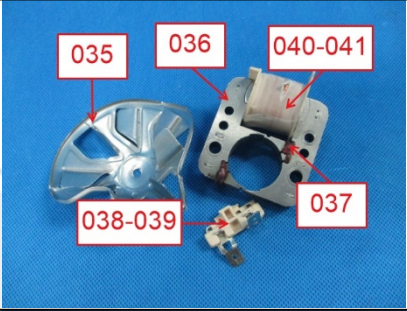
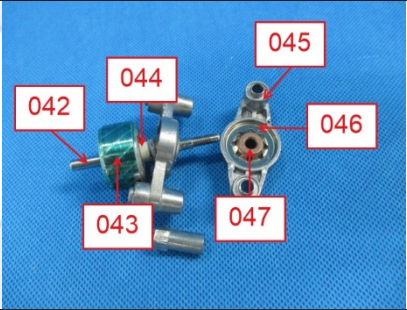

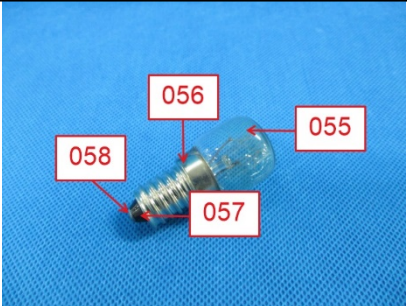
**1. TESTED SUBJECT DESCRIPTION**

Sample Number	Item Name	Tested Material Description	Photo
001	Case	Black coating	
002		Silvery metal base	
003	Wheel	Black coated metal wheel	
004	Holder	Silvery metal holder	
005	Handle	Silvery metal handle	
006		Black plastic handle	
007	Glass	Transparent glass	
008	Button	Silvery metal cover	
009		Black plastic wheel	
010	Case	Red plastic case	
011	Case	Silvery metal case	
012	Gasket	Black plastic gasket	
013	Holder	Silvery metal holder	
014	Gasket	Translucent white soft plastic gasket	
015	Holder	Silvery metal shaft	
016		Silvery metal holder	
017	Spring	Black coated metal spring	

**Technical Report No. 68.401.19.0423.01**  
**Dated 2019-03-11**

Sample Number	Item Name	Tested Material Description	Photo
018	Holder	Silvery metal plate	
019		Silvery metal holder	
020	Pipe	Green coated metal pipe	
021		Silvery metal shaft	
022		Silvery metal pin	
023	Shaft	Silvery metal shaft	
024	Holder	Silvery metal cap	
025		Silvery metal holder	
026		Silvery metal thread	
027	Shaft	Silvery metal shaft	
028	Tray	Black enamel	
029		Silvery metal base	
030	Shaft	Silvery metal shaft	
031	Shaft	Silvery metal shaft	
032	Holder	Silvery metal holder	
033	Plate	Silvery metal plate	

**Technical Report No. 68.401.19.0423.01**  
**Dated 2019-03-11**

Sample Number	Item Name	Tested Material Description	Photo
034	Holder	Silvery metal holder	
035	Motor parts	Silvery metal wheel	
036		Silvery metal blade	
037		Coppery metal holder	
038		Grey plastic holder	
039		Silvery metal pin	
040		White fabric sheet	
041		Coppery metal coil	
042	Motor parts	Silvery metal shaft	
043		Green coated metal wheel	
044		White plastic gasket	
045		Silvery metal case	
046		Silvery metal holder	
047		Coppery metal gasket	
048	Bulb	Transparent glass cap	
049		Silvery metal case	
050		White ceramic case	
051		Silvery metal plate	
052		Silvery metal shaft	
053		Silvery metal pin	
054		Silvery metal ring	
055	Bulb	Transparent glass cap	
056		Silvery metal case	
057		Black ceramic holder	
058		Silvery metal contact point	

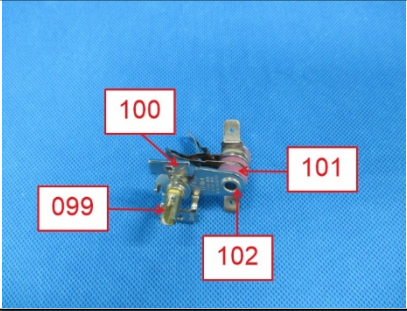
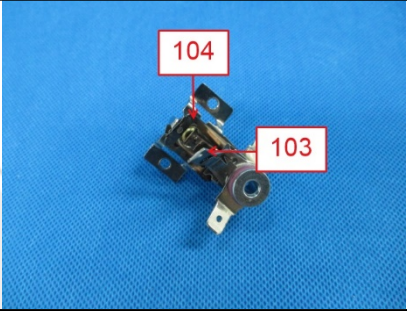
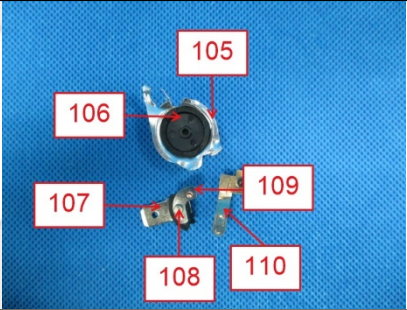
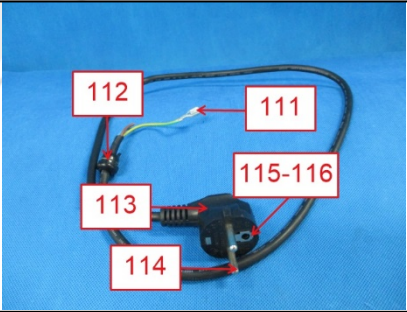

**Technical Report No. 68.401.19.0423.01**  
**Dated 2019-03-11**

Sample Number	Item Name	Tested Material Description	Photo
059	Bulb	Deep silvery metal wire	
060		Coppery/silvery metal wire	
061	Motor parts	Silvery metal shaft	
062		Silvery metal holder	
063		Silvery metal case	
064		Black printed silvery plastic label	
065	Motor parts	Silvery metal shaft	
066		Silvery metal gear	
067		Beige plastic gear	
068		Grey plastic gear	
069		Black magnet wheel	
070	Motor parts	Black plastic holder	
071		Blue plastic wheel	
072		Coppery metal coil	
073		Silvery metal holder	
074		Silvery metal pin	
075	Switch	Black plastic case	
076		Black plastic shaft	
077		Silvery metal pin	
078		Silvery metal plate	
079		Silvery/coppery metal contact point	
080		Silvery metal spring	

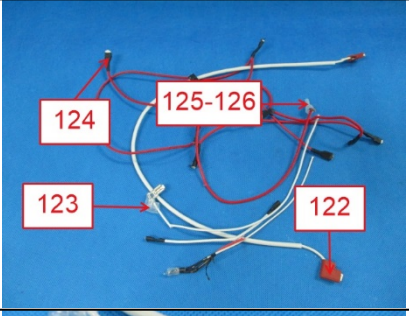
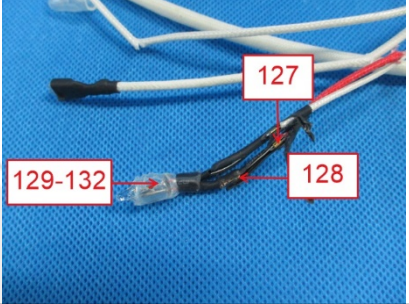
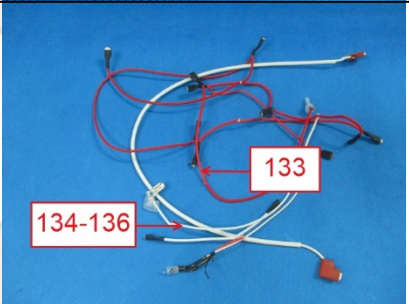
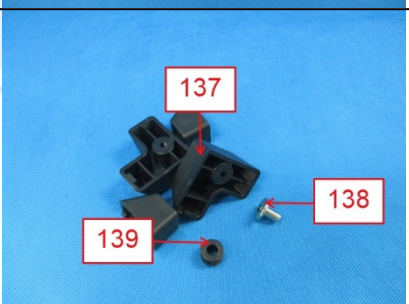
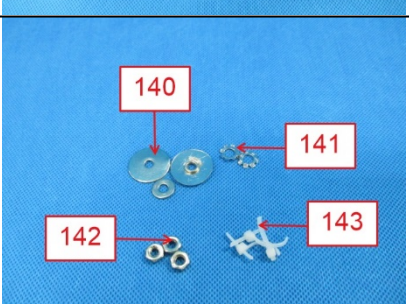
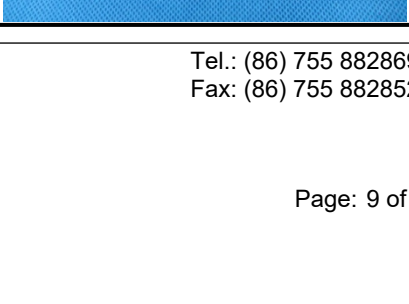
**Technical Report No. 68.401.19.0423.01**  
**Dated 2019-03-11**

Sample Number	Item Name	Tested Material Description	Photo
081	Timer	Silvery metal case	
082		Silvery metal cap	
083		Silvery metal shaft	
084	Timer	Silvery metal shaft	
085		Silvery metal tape	
086		Silvery metal wire	
087		Silvery metal wheel	
088		Silvery metal shaft	
089		Golden metal gasket	
090	Timer	Golden metal plate	
091		Silvery metal gear	
092	Timer	Black plastic base	
093		Golden metal pin	
094		Coppery metal plate	
095		Silvery metal holder	
096		Black coated metal spring	
097	Timer	Silvery metal holder	
098		Black coated metal holder	

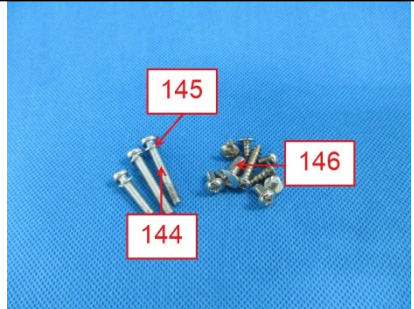
**Technical Report No. 68.401.19.0423.01**  
**Dated 2019-03-11**

Sample Number	Item Name	Tested Material Description	Photo
099	Temperature controller	Golden metal shaft	
100		Silvery metal case	
101		Pink ceramic wheel	
102		Silvery metal shaft	
103	Temperature controller	Silvery metal plate	
104		Coppery metal plate	
105	Switch	Silvery metal cap	
106		Black plastic cap	
107		Silvery metal pin	
108		Silvery metal shaft	
109		Silvery metal plate	
110		Coppery metal plate	
111	Connector	Silvery metal connector	
112	Holder	Black plastic holder	
113	Plug case	Black soft plastic case	
114		Silvery metal pin	
115		Silvery metal plate	
116		Black plastic holder inner	
117	Wire	Black soft plastic cable jacket	
118		Blue soft plastic wire jacket	
119		Brown soft plastic wire jacket	
120		Yellow/green soft plastic wire jacket	
121		Coppery metal wire	

**Technical Report No. 68.401.19.0423.01**  
**Dated 2019-03-11**

Sample Number	Item Name	Tested Material Description	Photo
122	Sleeve	Orange soft plastic sleeve	
123		Transparent soft plastic sleeve	
124		Black soft plastic sleeve	
125	Connector	Translucent plastic cap	
126		Silvery metal holder inner	
127	Holder	Golden metal holder	
128	Resistor	Multi-color printed brown body with pin	
129	Bulb	Transparent soft plastic sleeve	
130		Transparent glass	
131		Deep silvery metal fuse	
132	Copper/silvery metal wire		
133	Sleeve	Red fabric sleeve	
134		White fabric sleeve	
135	Wire	White soft plastic wire jacket	
136		Silvery metal wire	
137	Gasket	Black plastic gasket	
138	Shaft	Silvery metal shaft	
139	Wheel	Black plastic wheel	
140	Gasket	Silvery metal gasket	
141		Silvery metal gasket	
142	Nut	Silvery metal nut	
143	Holder	Translucent plastic holder	

**Technical Report No. 68.401.19.0423.01**  
**Dated 2019-03-11**

Sample Number	Item Name	Tested Material Description	Photo
144	Screw	Silvery metal screw	
145	Gasket	Silvery metal gasket	
146	Screw	Deep silvery metal screw	



## 2. TEST RESULTS

### 2.1. SCREENING TEST

Test method: With reference to EN 62321-1:2013, EN 62321-2:2014, EN 62321-3-1:2014 and EN 62321-8:2017. For Heavy Metals and Flame Retardants, analyzed by Energy Dispersive X-ray Fluorescence Spectrometers (XRF); for phthalates, analyzed by Gas Chromatography and Mass Spectrometry (GC-MS).

Sample No.	Heavy Metals and Flame Retardants					Phthalates			
	Cd	Cr	Hg	Pb	Br	DEHP	BBP	DBP	DIBP
001	BL	BL	BL	BL	BL	BL	BL	BL	BL
002	BL	BL	BL	BL	NA	NA	NA	NA	NA
003	BL	Inc. <sup>(a)</sup>	BL	BL	NA	NA	NA	NA	NA
004	BL	Inc. <sup>(a)</sup>	BL	BL	NA	NA	NA	NA	NA
005	BL	Inc. <sup>(a)</sup>	BL	BL	NA	NA	NA	NA	NA
006	BL	BL	BL	BL	Inc. <sup>(a)</sup>	BL	BL	BL	BL
007	BL	BL	BL	BL	NA	NA	NA	NA	NA
008	BL	Inc. <sup>(a)</sup>	BL	BL	NA	NA	NA	NA	NA
009	BL	BL	BL	BL	Inc. <sup>(a)</sup>	BL	BL	BL	BL
010	BL	BL	BL	BL	BL	BL	BL	BL	BL
011	BL	Inc. <sup>(a)</sup>	BL	BL	NA	NA	NA	NA	NA
012	BL	BL	BL	BL	BL	BL	BL	BL	BL
013	BL	BL	BL	BL	NA	NA	NA	NA	NA
014	BL	BL	BL	BL	BL	BL	BL	BL	BL
015	BL	BL	BL	BL	NA	NA	NA	NA	NA
016	BL	BL	BL	BL	NA	NA	NA	NA	NA
017	BL	BL	BL	BL	NA	NA	NA	NA	NA
018	BL	BL	BL	BL	NA	NA	NA	NA	NA
019	BL	BL	BL	BL	NA	NA	NA	NA	NA
020	BL	Inc. <sup>(a)</sup>	BL	BL	NA	NA	NA	NA	NA
021	BL	Inc. <sup>(a)</sup>	BL	BL	NA	NA	NA	NA	NA
022	BL	Inc. <sup>(a)</sup>	BL	BL	NA	NA	NA	NA	NA
023	BL	BL	BL	BL	NA	NA	NA	NA	NA
024	BL	Inc. <sup>(a)</sup>	BL	BL	NA	NA	NA	NA	NA
025	BL	BL	BL	BL	NA	NA	NA	NA	NA
026	BL	BL	BL	BL	NA	NA	NA	NA	NA
027	BL	Inc. <sup>(a)</sup>	BL	BL	NA	NA	NA	NA	NA

**Technical Report No. 68.401.19.0423.01**  
**Dated 2019-03-11**

Sample No.	Heavy Metals and Flame Retardants					Phthalates			
	Cd	Cr	Hg	Pb	Br	DEHP	BBP	DBP	DIBP
028	BL	Inc. <sup>(a)</sup>	BL	BL	BL	BL	BL	BL	BL
029	BL	BL	BL	BL	NA	NA	NA	NA	NA
030	BL	Inc. <sup>(a)</sup>	BL	BL	NA	NA	NA	NA	NA
031	BL	Inc. <sup>(a)</sup>	BL	BL	NA	NA	NA	NA	NA
032	BL	BL	BL	BL	NA	NA	NA	NA	NA
033	BL	Inc. <sup>(a)</sup>	BL	BL	NA	NA	NA	NA	NA
034	BL	BL	BL	BL	NA	NA	NA	NA	NA
035	BL	BL	BL	BL	NA	NA	NA	NA	NA
036	BL	Inc. <sup>(a)</sup>	BL	BL	NA	NA	NA	NA	NA
037	BL	BL	BL	BL	NA	NA	NA	NA	NA
038	BL	BL	BL	BL	Inc. <sup>(a)</sup>	BL	BL	BL	BL
039	BL	BL	BL	BL	NA	NA	NA	NA	NA
040	BL	BL	BL	BL	BL	BL	BL	BL	BL
041	BL	BL	BL	BL	NA	NA	NA	NA	NA
042	BL	Inc. <sup>(a)</sup>	BL	BL	NA	NA	NA	NA	NA
043	BL	BL	BL	BL	NA	NA	NA	NA	NA
044	BL	BL	BL	BL	BL	BL	BL	BL	BL
045	BL	BL	BL	BL	NA	NA	NA	NA	NA
046	BL	Inc. <sup>(a)</sup>	BL	BL	NA	NA	NA	NA	NA
047	BL	BL	BL	BL	NA	NA	NA	NA	NA
048	BL	BL	BL	BL	NA	NA	NA	NA	NA
049	BL	Inc. <sup>(a)</sup>	BL	BL	NA	NA	NA	NA	NA
050	BL	BL	BL	BL	NA	NA	NA	NA	NA
051	BL	Inc. <sup>(a)</sup>	BL	BL	NA	NA	NA	NA	NA
052	BL	BL	BL	BL	NA	NA	NA	NA	NA
053	BL	Inc. <sup>(a)</sup>	BL	BL	NA	NA	NA	NA	NA
054	BL	Inc. <sup>(a)</sup>	BL	BL	NA	NA	NA	NA	NA
055	BL	BL	BL	BL	NA	NA	NA	NA	NA
056	BL	BL	BL	BL	NA	NA	NA	NA	NA
057	BL	Inc. <sup>(a)</sup>	BL	Inc. <sup>(a)</sup>	NA	NA	NA	NA	NA
058	BL	BL	BL	BL	NA	NA	NA	NA	NA
059	BL	BL	BL	BL	NA	NA	NA	NA	NA

**Technical Report No. 68.401.19.0423.01**  
**Dated 2019-03-11**

Sample No.	Heavy Metals and Flame Retardants					Phthalates			
	Cd	Cr	Hg	Pb	Br	DEHP	BBP	DBP	DIBP
060	BL	BL	BL	BL	NA	NA	NA	NA	NA
061	BL	BL	BL	BL	NA	NA	NA	NA	NA
062	BL	BL	BL	BL	NA	NA	NA	NA	NA
063	BL	BL	BL	BL	NA	NA	NA	NA	NA
064	BL	BL	BL	BL	BL	BL	BL	BL	BL
065	BL	BL	BL	BL	NA	NA	NA	NA	NA
066	BL	BL	BL	BL	NA	NA	NA	NA	NA
067	BL	BL	BL	BL	BL	BL	BL	BL	BL
068	BL	BL	BL	BL	BL	BL	BL	BL	BL
069	BL	BL	BL	BL	NA	NA	NA	NA	NA
070	BL	BL	BL	BL	Inc. <sup>(a)</sup>	BL	BL	BL	BL
071	BL	BL	BL	BL	Inc. <sup>(a)</sup>	BL	BL	BL	BL
072	BL	BL	BL	BL	NA	NA	NA	NA	NA
073	BL	Inc. <sup>(a)</sup>	BL	BL	NA	NA	NA	NA	NA
074	BL	BL	BL	BL	NA	NA	NA	NA	NA
075	BL	BL	BL	BL	Inc. <sup>(a)</sup>	BL	BL	BL	BL
076	BL	BL	BL	BL	Inc. <sup>(a)</sup>	BL	BL	BL	BL
077	BL	BL	BL	BL	NA	NA	NA	NA	NA
078	BL	BL	BL	BL	NA	NA	NA	NA	NA
079	OL <sup>(a)</sup>	BL	BL	BL	NA	NA	NA	NA	NA
080	BL	Inc. <sup>(a)</sup>	BL	BL	NA	NA	NA	NA	NA
081	BL	BL	BL	BL	NA	NA	NA	NA	NA
082	BL	BL	BL	BL	NA	NA	NA	NA	NA
083	BL	BL	BL	BL	NA	NA	NA	NA	NA
084	BL	Inc. <sup>(a)</sup>	BL	BL	NA	NA	NA	NA	NA
085	BL	Inc. <sup>(a)</sup>	BL	BL	NA	NA	NA	NA	NA
086	BL	Inc. <sup>(a)</sup>	BL	BL	NA	NA	NA	NA	NA
087	BL	BL	BL	BL	NA	NA	NA	NA	NA
088	BL	BL	BL	OL <sup>(a)</sup>	NA	NA	NA	NA	NA
089	BL	BL	BL	OL <sup>(a)</sup>	NA	NA	NA	NA	NA
090	BL	BL	BL	BL	NA	NA	NA	NA	NA
091	BL	BL	BL	BL	NA	NA	NA	NA	NA

**Technical Report No. 68.401.19.0423.01**  
**Dated 2019-03-11**

Sample No.	Heavy Metals and Flame Retardants					Phthalates			
	Cd	Cr	Hg	Pb	Br	DEHP	BBP	DBP	DIBP
092	BL	BL	BL	BL	BL	BL	BL	BL	BL
093	BL	BL	BL	BL	NA	NA	NA	NA	NA
094	BL	BL	BL	BL	NA	NA	NA	NA	NA
095	BL	BL	BL	BL	NA	NA	NA	NA	NA
096	BL	BL	BL	BL	NA	NA	NA	NA	NA
097	BL	BL	BL	BL	NA	NA	NA	NA	NA
098	BL	Inc. <sup>(a)</sup>	BL	BL	NA	NA	NA	NA	NA
099	BL	BL	BL	BL	NA	NA	NA	NA	NA
100	BL	BL	BL	BL	NA	NA	NA	NA	NA
101	BL	Inc. <sup>(a)</sup>	BL	BL	NA	NA	NA	NA	NA
102	BL	Inc. <sup>(a)</sup>	BL	BL	NA	NA	NA	NA	NA
103	BL	BL	BL	BL	NA	NA	NA	NA	NA
104	BL	Inc. <sup>(a)</sup>	BL	BL	NA	NA	NA	NA	NA
105	BL	BL	BL	BL	NA	NA	NA	NA	NA
106	BL	BL	BL	BL	BL	BL	BL	BL	BL
107	BL	BL	BL	BL	NA	NA	NA	NA	NA
108	BL	BL	BL	BL	NA	NA	NA	NA	NA
109	BL	BL	BL	BL	NA	NA	NA	NA	NA
110	BL	BL	BL	BL	NA	NA	NA	NA	NA
111	BL	BL	BL	BL	NA	NA	NA	NA	NA
112	BL	BL	BL	BL	BL	BL	BL	BL	BL
113	BL	BL	BL	BL	BL	BL	BL	BL	BL
114	BL	BL	BL	BL	NA	NA	NA	NA	NA
115	BL	BL	BL	BL	NA	NA	NA	NA	NA
116	BL	BL	BL	BL	Inc. <sup>(a)</sup>	BL	BL	BL	BL
117	BL	BL	BL	BL	BL	BL	BL	BL	BL
118	BL	BL	BL	BL	BL	BL	BL	BL	BL
119	BL	BL	BL	BL	BL	BL	BL	BL	BL
120	BL	BL	BL	BL	BL	BL	BL	BL	BL
121	BL	BL	BL	BL	NA	NA	NA	NA	NA
122	BL	BL	BL	BL	BL	BL	BL	BL	BL
123	BL	BL	BL	BL	BL	BL	BL	BL	BL

**Technical Report No. 68.401.19.0423.01**  
**Dated 2019-03-11**

Sample No.	Heavy Metals and Flame Retardants					Phthalates			
	Cd	Cr	Hg	Pb	Br	DEHP	BBP	DBP	DIBP
124	BL	BL	BL	BL	BL	BL	BL	BL	BL
125	BL	BL	BL	BL	BL	BL	BL	BL	BL
126	BL	BL	BL	BL	NA	NA	NA	NA	NA
127	BL	BL	BL	BL	NA	NA	NA	NA	NA
128	BL	BL	BL	BL	BL	BL	BL	BL	BL
129	BL	BL	BL	BL	BL	BL	BL	BL	BL
130	BL	BL	BL	BL	NA	NA	NA	NA	NA
131	BL	BL	BL	BL	NA	NA	NA	NA	NA
132	BL	BL	BL	BL	NA	NA	NA	NA	NA
133	BL	BL	BL	BL	BL	BL	BL	BL	BL
134	BL	BL	BL	BL	BL	BL	BL	BL	BL
135	BL	BL	BL	BL	BL	BL	BL	BL	BL
136	BL	BL	BL	BL	NA	NA	NA	NA	NA
137	BL	BL	BL	BL	BL	BL	BL	BL	BL
138	BL	BL	BL	BL	NA	NA	NA	NA	NA
139	BL	BL	BL	BL	Inc. <sup>(a)</sup>	BL	BL	BL	BL
140	BL	BL	BL	BL	NA	NA	NA	NA	NA
141	BL	BL	BL	BL	NA	NA	NA	NA	NA
142	BL	BL	BL	BL	NA	NA	NA	NA	NA
143	BL	BL	BL	BL	BL	BL	BL	BL	BL
144	BL	Inc. <sup>(a)</sup>	BL	BL	NA	NA	NA	NA	NA
145	BL	BL	BL	BL	NA	NA	NA	NA	NA
146	BL	BL	BL	BL	NA	NA	NA	NA	NA

Note:

- “BL” denotes below limit
- “OL” denotes over limit
- “Inc.” denotes inconclusive
- “NA” denotes not applicable
- “(a)” denotes further confirmation test was conducted, results are listed in 2.2 and 2.3.

**Technical Report No. 68.401.19.0423.01**  
**Dated 2019-03-11**

– XRF screening limits in mg/kg for regulated elements in various matrices

ELEMENT	POLYMER		
	BL	INCONCLUSIVE	OL
Cd	$X < (70-3\sigma)$	$(70-3\sigma) < X < (130+3\sigma)$	$X > (130+3\sigma)$
Pb	$X < (700-3\sigma)$	$(700-3\sigma) < X < (1300+3\sigma)$	$X > (1300+3\sigma)$
Hg	$X < (700-3\sigma)$	$(700-3\sigma) < X < (1300+3\sigma)$	$X > (1300+3\sigma)$
Br	$X < (300-3\sigma)$	$X > (300-3\sigma)$	NA
Cr	$X < (700-3\sigma)$	$X > (700-3\sigma)$	NA

ELEMENT	METAL		
	BL	INCONCLUSIVE	OL
Cd	$X < (70-3\sigma)$	$(70-3\sigma) < X < (130+3\sigma)$	$X > (130+3\sigma)$
Pb	$X < (700-3\sigma)$	$(700-3\sigma) < X < (1300+3\sigma)$	$X > (1300+3\sigma)$
Hg	$X < (700-3\sigma)$	$(700-3\sigma) < X < (1300+3\sigma)$	$X > (1300+3\sigma)$
Cr	$X < (700-3\sigma)$	$X > (700-3\sigma)$	NA

ELEMENT	COMPLEX MATERIAL		
	BL	INCONCLUSIVE	OL
Cd	$X < (50-3\sigma)$	$(50-3\sigma) < X < (150+3\sigma)$	$X > (150+3\sigma)$
Pb	$X < (500-3\sigma)$	$(500-3\sigma) < X < (1500+3\sigma)$	$X > (1500+3\sigma)$
Hg	$X < (500-3\sigma)$	$(500-3\sigma) < X < (1500+3\sigma)$	$X > (1500+3\sigma)$
Br	$X < (250-3\sigma)$	$X > (250-3\sigma)$	NA
Cr	$X < (500-3\sigma)$	$X > (500-3\sigma)$	NA

– Screening limits in mg/kg for regulated phthalates in various matrices

PHthalATES	BL	INCONCLUSIVE
DEHP	$X < 600$	$X \geq 600$
BBP	$X < 600$	$X \geq 600$
DBP	$X < 600$	$X \geq 600$
DIBP	$X < 600$	$X \geq 600$

**2.2. HEAVY METAL CONTENT**

Test method: With reference to EN 62321-4:2017, EN 62321-5:2014, EN 62321-7-1:2015 and EN 62321-7-2:2017, analyzed by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES) and UV-Vis spectrophotometer. [Reporting Limit: 2 mg/kg for Cadmium; 10 mg/kg or 0.10 µg/cm<sup>2</sup> for Hexavalent Chromium, 10 mg/kg for Lead and Mercury.]

Sample No.	Result [mg/kg]			
	Total Cadmium	Hexavalent Chromium	Total Mercury	Total Lead
003	--	Negative	--	--
004	--	Negative	--	--
005	--	Negative	--	--
008	--	Negative	--	--
011	--	Negative	--	--
020	--	Negative	--	--
021	--	Negative	--	--
022	--	Negative	--	--
024	--	Negative	--	--
027	--	Negative	--	--
028	--	<10	--	--
030	--	Negative	--	--
031	--	Negative	--	--
033	--	Negative	--	--
036	--	Negative	--	--
042	--	Negative	--	--
046	--	Negative	--	--
049	--	Negative	--	--
051	--	Negative	--	--
053	--	Negative	--	--
054	--	Negative	--	--
057	--	<10	--	231
073	--	Negative	--	--
079	1.97×10 <sup>3(b)</sup>	--	--	--

**Technical Report No. 68.401.19.0423.01**  
**Dated 2019-03-11**

Sample No.	Result [mg/kg]			
	Total Cadmium	Hexavalent Chromium	Total Mercury	Total Lead
080	--	Negative	--	--
084	--	Negative	--	--
085	--	Negative	--	--
086	--	Negative	--	--
088	--	--	--	2.56×10 <sup>3(a)</sup>
089	--	--	--	3.44×10 <sup>4(a)</sup>
098	--	Negative	--	--
101	--	<10	--	--
102	--	Negative	--	--
104	--	Negative	--	--
144	--	Negative	--	--
<b>RoHS Requirement</b>	100	1000	1000	1000

Note:

- “mg/kg” denotes milligram per kilogram
- “<” denotes less than
- “µg/cm<sup>2</sup>” denotes micrograms per square centimeter
- “Negative” denotes the absorbance value of sample is less than the absorbance value of the 0.10 µg/cm<sup>2</sup> equivalent comparison standard solution, the sample is considered to be negative for Hexavalent Chromium.
- “--” denotes tested by XRF, result is listed in 2.1
- “(a)” denotes the exempt item according to DIRECTIVE 2011/65/EU Annex III item 6(c) “Copper alloy containing up to 4 % lead by weight”.
- “(b)” denotes the exempt item according to DIRECTIVE 2011/65/EU Annex III item 8(b) “Cadmium and its compounds in electrical contacts”

**2.3. POLYBROMINATED BIPHENYLS (PBBs) AND POLYBROMINATED DIPHENYL ETHERS (PBDEs) CONTENT**

Test Method: With reference to EN 62321-6:2015, extracted by toluene and analyzed by Gas Chromatography and Mass Spectrometry (GC-MS). [Reporting Limit: 5 mg/kg]

Test Item		Result [mg/kg]		RoHS Requirement [mg/kg]
		Sample 006+009+038	Sample 070+071+075	
PBBs	Monobromobiphenyl	< 5	< 5	Sum of PBBs 1000
	Dibromobiphenyl	< 5	< 5	
	Tribromobiphenyl	< 5	< 5	
	Tetrabromobiphenyl	< 5	< 5	
	Pentabromobiphenyl	< 5	< 5	
	Hexabromobiphenyl	< 5	< 5	
	Heptabromobiphenyl	< 5	< 5	
	Octabromobiphenyl	< 5	< 5	
	Nonabromobiphenyl	< 5	< 5	
	Decabromobiphenyl	< 5	< 5	
	Sum of PBBs	< 5	< 5	
PBDEs	Monobromodiphenyl Ether	< 5	< 5	Sum of PBDEs 1000
	Dibromodiphenyl Ether	< 5	< 5	
	Tribromodiphenyl Ether	< 5	< 5	
	Tetrabromodiphenyl Ether	< 5	< 5	
	Pentabromodiphenyl Ether	< 5	< 5	
	Hexabromodiphenyl Ether	< 5	< 5	
	Heptabromodiphenyl Ether	< 5	< 5	
	Octabromodiphenyl Ether	< 5	< 5	
	Nonabromodiphenyl Ether	10	< 5	
	Decabromodiphenyl Ether	98	< 5	
	Sum of PBDEs	108	< 5	

**Note:**

- “mg/kg” denotes milligram per kilogram
- “<” denotes less than

(Continued)

Test Item		Result [mg/kg]	RoHS Requirement [mg/kg]
		Sample 076+116+139	
PBBs	Monobromobiphenyl	< 5	Sum of PBBs 1000
	Dibromobiphenyl	< 5	
	Tribromobiphenyl	< 5	
	Tetrabromobiphenyl	< 5	
	Pentabromobiphenyl	< 5	
	Hexabromobiphenyl	< 5	
	Heptabromobiphenyl	< 5	
	Octabromobiphenyl	< 5	
	Nonabromobiphenyl	< 5	
	Decabromobiphenyl	< 5	
	Sum of PBBs	< 5	
PBDEs	Monobromodiphenyl Ether	< 5	Sum of PBDEs 1000
	Dibromodiphenyl Ether	< 5	
	Tribromodiphenyl Ether	< 5	
	Tetrabromodiphenyl Ether	< 5	
	Pentabromodiphenyl Ether	< 5	
	Hexabromodiphenyl Ether	< 5	
	Heptabromodiphenyl Ether	< 5	
	Octabromodiphenyl Ether	< 5	
	Nonabromodiphenyl Ether	< 5	
	Decabromodiphenyl Ether	< 5	
	Sum of PBDEs	< 5	

Note:

- “mg/kg” denotes miligram per kilogram
- “<” denotes less than

\*\*\*\*\*

**APPENDIX I:**

Photos of submitted products



**APPENDIX II:**

According to client's declaration, tested material would be produced as relevant product(s):

JK09A-01	JK09A-02	JK09B-01	JK09B-02
JK16B01-RM	JK16B01-L	JK16B01-RL	JK16B01-ML
JK19B01-RM	JK19B01-L	JK19B01-RL	JK19B01-ML
JK25B01-RM	JK25B01-L	JK25B01-RL	JK25B01-ML
JK25B02-RM	JK25B02-L	JK25B02-RL	JK25B02-ML
JK30B01-RM	JK30B01-L	JK30B01-RL	JK30B01-ML
JK30B02-RM	JK30B02-L	JK30B02-RL	JK30B02-ML
JK38B01-RM	JK38B01-L	JK38B01-RL	JK38B01-ML
JK38B02-RM	JK38B02-L	JK38B02-RL	JK38B02-ML
JK48B01-RM	JK48B01-L	JK48B01-RL	JK48B01-ML
JK48B02-RM	JK48B02-L	JK48B02-RL	JK48B02-ML
JK60B01-RM	JK60B01-L	JK60B01-RL	JK60B01-ML
JK60B02-RM	JK60B02-L	JK60B02-RL	JK60B02-ML
JK85B01-RM	JK85B01-L	JK85B01-RL	JK85B01-ML
JK85B02-RM	JK85B02-L	JK85B02-RL	JK85B02-ML
JK120B02-RM	JK120B02-L	JK120B02-RL	JK120B02-ML
JK120B03-M	JK120B03-RM	JK120B03-L	JK120B03-RL
JK16A01-RM	JK16A01-L	JK16A01-RL	JK16A01-ML
JK19A01-RM	JK19A01-L	JK19A01-RL	JK19A01-ML
JK25A01-RM	JK25A01-L	JK25A01-RL	JK25A01-ML
JK25A02-RM	JK25A02-L	JK25A02-RL	JK25A02-ML
JK30A01-RM	JK30A01-L	JK30A01-RL	JK30A01-ML
JK30A02-RM	JK30A02-L	JK30A02-RL	JK30A02-ML
JK38A01-RM	JK38A01-L	JK38A01-RL	JK38A01-ML
JK38A02-RM	JK38A02-L	JK38A02-RL	JK38A02-ML
JK48A01-RM	JK48A01-L	JK48A01-RL	JK48A01-ML
JK48A02-RM	JK48A02-L	JK48A02-RL	JK48A02-ML



Technical Report No. 68.401.19.0423.01  
Dated 2019-03-11

JK60A01-RM	JK60A01-L	JK60A01-RL	JK60A01-ML
JK60A02-RM	JK60A02-L	JK60A02-RL	JK60A02-ML
JK85A01-RM	JK85A01-L	JK85A01-RL	JK85A01-ML
JK85A02-RM	JK85A02-L	JK85A02-RL	JK85A02-ML
JK120A02-RM	JK120A02-L	JK120A02-RL	JK120A02-ML
JK120A03-RM	JK120A03-L	JK120A03-RL	JK120A03-ML
JK30B02-H	JK30B02-RH	JK30B02-MH	JK30B02-RMH
JK30B02-RMHL	JK38B02-H	JK38B02-RH	JK38B02-MH
JK38B02-MHL	JK38B02-RMHL	JK48B02-H	JK48B02-RH
JK48B02-RHL	JK48B02-MHL	JK48B02-RMHL	JK60B02-H
JK60B02-RMH	JK60B02-HL	JK60B02-RHL	JK60B02-MHL
JK85B02-RH	JK85B02-MH	JK85B02-RMH	JK85B02-HL
JK30A02-H	JK30A02-RH	JK30A02-MH	JK30A02-RMH
JK38A02-H	JK38A02-RH	JK38A02-MH	JK38A02-RMH
JK38A02-MHL	JK38A02-RMHL	JK48A02-H	JK48A02-RH
JK48A02-RHL	JK48A02-MHL	JK48A02-RMHL	JK60A02-H
JK60A02-RMH	JK60A02-HL	JK60A02-RHL	JK60A02-MHL
JK85A02-RH	JK85A02-MH	JK85A02-RMH	JK85A02-HL
JK85A02-RMHL	JK85B02-RMHL	JK09C-01	JK16B01-M
JK16C01	JK16C01-R	JK16C01-M	JK16C01-RM
JK19C01	JK19C01-R	JK19C01-M	JK19C01-RM
JK25C01	JK25C01-R	JK25C01-M	JK25C01-RM
JK25C02	JK25C02-R	JK25C02-M	JK25C02-RM
JK30C01	JK30C01-R	JK30C01-M	JK30C01-RM
JK30C02	JK30C02-R	JK30C02-M	JK30C02-RM
JK38C01	JK38C01-R	JK38C01-M	JK38C01-RM
JK38C02	JK38C02-R	JK38C02-M	JK38C02-RM
JK48C01	JK48C01-R	JK48C01-M	JK48C01-RM
JK48C02	JK48C02-R	JK48C02-M	JK48C02-RM
JK60C01	JK60C01-R	JK60C01-M	JK60C01-RM



Technical Report No. 68.401.19.0423.01  
Dated 2019-03-11

JK60C02	JK60C02-R	JK60C02-M	JK60C02-RM
JK09D-01	JK09D-02	JK16B01	JK16B01-R
JK16B01-RML	JK19B01	JK19B01-R	JK19B01-M
JK19B01-RML	JK25B01	JK25B01-R	JK25B01-M
JK25B01-RML	JK25B02-R	JK25B02-M	JK120B02-RML
JK25B02-RML	JK30B01	JK30B01-R	JK30B01-M
JK30B01-RML	JK30B02-R	JK30B02-M	JK120B03-R
JK30B02-RML	JK38B01	JK38B01-R	JK38B01-M
JK38B01-RML	JK38B02-R	JK38B02-M	JK120B03-RML
JK38B02-RML	JK48B01	JK48B01-R	JK48B01-M
JK48B01-RML	JK48B02-R	JK48B02-M	JK120B03-ML
JK48B02-RML	JK60B01	JK60B01-R	JK60B01-M
JK60B01-RML	JK60B02-R	JK60B02-M	JK25A02-RML
JK60B02-RML	JK85B01	JK85B01-R	JK85B01-M
JK85B01-RML	JK85B02	JK85B02-R	JK85B02-M
JK85B02-RML	JK120B02	JK120B02-R	JK120B02-M
JK09C-01	JK09C-02	JK16A01	JK16A01-R
JK16A01-RML	JK19A01	JK19A01-R	JK19A01-M
JK19A01-RML	JK25A01	JK25A01-R	JK25A01-M
JK25A01-RML	JK25A02-R	JK25A02-M	JK30A01-M
JK30A01-RML	JK30A02-R	JK30A02-M	JK30A01
JK30A02-RML	JK38A01	JK38A01-R	JK38A01-M
JK38A02-RM	JK38A02-R	JK38A02-M	JK30A01-R
JK38A02-RML	JK48A01	JK48A01-R	JK48A01-M
JK48A01-RML	JK48A02-R	JK48A02-M	JK85A01-M
JK48A02-RML	JK60A01	JK60A01-R	JK60A01-M
JK60A01-RML	JK60A02-R	JK60A02-M	JK85A02-M
JK60A02-RML	JK85A01	JK85A01-R	JK120A02-M
JK85A01-RML	JK85A02	JK85A02-R	JK120A02-RML
JK85A02-RML	JK120A02	JK120A02-R	JK120A03-R



**Technical Report No. 68.401.19.0423.01**  
**Dated 2019-03-11**

JK120A03-RML	JK120A03-M	JK30B02-MHL	JK38B02-RHL
JK30B02-HL	JK30B02-RHL	JK48B02-HL	JK38B02-HL
JK38B02-RMH	JK48B02-MH	JK48B02-RMH	JK60B02-MH
JK60B02-RH	JK85B02-H	JK60B02-RMHL	JK85B02-RHL
JK30A02-HL	JK85B02-MHL	JK30A02-RHL	JK30A02-MHL
JK48A02-MH	JK48A02-RMH	JK48A02-HL	JK38A02-RHL
JK60A02-RH	JK60A02-MH	JK38A02-HL	JK85A02-H
JK85A02-RHL	JK85A02-MHL	JK60A02-RMHL	JK60C02-RML
JK16C01-L	JK16C01-RL	JK16C01-ML	JK16C01-RML
JK19C01-L	JK19C01-RL	JK19C01-ML	JK19C01-RML
JK25C01-L	JK25C01-RL	JK25C01-ML	JK25C01-RML
JK25C02-L	JK25C02-RL	JK25C02-ML	JK25C02-RML
JK30C01-L	JK30C01-RL	JK30C01-ML	JK30C01-RML
JK30C02-L	JK30C02-RL	JK30C02-ML	JK30C02-RML
JK38C01-L	JK38C01-RL	JK38C01-ML	JK38C01-RML
JK38C02-L	JK38C02-RL	JK38C02-ML	JK38C02-RML
JK48C01-L	JK48C01-RL	JK48C01-ML	JK48C01-RML
JK48C02-L	JK48C02-RL	JK48C02-ML	JK48C02-RML
JK60C01-L	JK60C01-RL	JK60C01-ML	JK60C01-RML
JK60C02-L	JK60C02-RL	JK60C02-ML	JK16A01-M