



CONSUMER PRODUCTS SERVICES DIVISION

GUANGDONG XINYU TECHNOLOGY INDUSTRIAL CO LTD

Technical Report: (8519)060-0484(Revision)

April 18, 2019

Date Received: March 01, 2019

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GUANGDONG XINYU TECHNOLOGY INDUSTRIAL CO
LTD
LAIMEI INDUSTRIAL DISTRICT
CHENGHAI, SHANTOU
SHANTOU, GUANGDONG
CHINA

Sample Description: 1:18 AUTO SPEED UP CAR ASST

1.) A
2.) B
3.) C
4.) D

Vendor: N/A

Sample Size: 12

Manufacturer: N/A

Style No(s): RC18-16AA/RC18-15AA/
3429/3903 (3810/3912)

Buyer: N/A

SKN/SKU No.: N/A

Labeled Age Grade: 6+

PO No.: N/A

Appropriate Age Grade: NOT REQUESTED

Ref #: N/A

Client Specified Age: NOT SPECIFIED

Country of Origin: CHINA

Grade:

Tested Age Grade: OVER 6 YEARS OF AGE

Assortment No.: N/A

UPC Code: 4895181838100

(*)EXECUTIVE SUMMARY:

The sample(s) MEET the following requirement(s):

- The DIBP content requirements of the European Council Directive 2011/65/EU on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) with its amendments up to EU No. 2015/863.
- European Parliament and Council Directive 2011/65/EU on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS)
- **Phthalates Test – Directive 2015/863/EU Amendment of European Parliament and Council Directive 2011/65/EU on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS)**

Note: The amendment will be effective on 22 July 2019. For medical devices and control instruments, effective date will be 22 July 2021.

Note: This report is amendment of and supersedes the previous (8519)060-0484 dated March 15, 2019.

BUREAU VERITAS SHENZHEN CO.,LTD

Choy Hon Kwong, Adams
Senior Manager
Analytical Department

AC/su



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TEST RESULT

DIBP CONTENT (European Council Directive 2011/65/EU on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) with its Amendments)

Test Parameter:				DIBP	
Limit (%):				0.1	
	Color / Component	Location	Style	Result (%)	Conclusion
A.	Multicolor printed grey plastic Multicolor printed black plastic Multicolor printed white soft plastic	Car Pedestal, car Rearview mirror	A A-D A-D	ND	Pass
B.	Silver printed transparent plastic / glue Translucent soft plastic Black soft plastic	Sticker Glue Tyre	A-D A-D A-D	ND	Pass
C.	Clear plastic Black soft plastic Red printed transparent plastic	Washer, screw Antenna, remote control Car lamp	A-D A-D A-D	ND	Pass
D.	Multicolor printed light grey plastic Transparent red plastic Silver / black / red printed grey plastic	Car Car lamp Car lamp	B B C	ND	Pass
E.	Multicolor printed blue plastic Red printed white plastic Black printed orange plastic	Car Wheel Car	C C D	ND	Pass
F.	Translucent plastic Light black plastic Clear plastic	Front wheel Gear Sleeve, PCB	A-D A-D A-D	ND	Pass
G.	Red soft plastic White printed black soft plastic Red soft plastic	Thin wire jacket Wire jacket Wire jacket	A-D A-D A-D	ND	Pass
H.	White printed bright red soft plastic White printed black soft plastic Black plastic	wire jacket Sleeve, wire jacket Slide, slide switch	A-D A-D A-D	ND	Pass
I.	Brown plastic Black plastic Translucent / silver body	Board, slide switch Button, button switch, PCB LED, PCB	A-D A-D A-D	ND	Pass
J.	Black plastic Brown plastic White / black printed green coated translucent / beige plastic / coppery metal	Slide, slide switch, PCB Board, slide switch, PCB PCB	A-D A-D A-D	ND	Pass
K.	Grey printed green plastic White printed black soft plastic White printed green coated brown plastic / coppery metal	Sleeve, capacitor, main PCB Sleeve, pin, capacitor, main PCB Main PCB	A-D A-D A-D	ND	Pass



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TEST RESULT

DIBP CONTENT (European Council Directive 2011/65/EU on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) with its Amendments)

Test Parameter:				DIBP	
Limit (%):				0.1	
	Color / Component	Location	Style	Result (%)	Conclusion
L.	Black soft plastic Deep beige plastic Translucent plastic	Thin wire jacket Gear, motor Gear, motor	A-D A-D A-D	ND	Pass
M.	Black soft plastic Translucent plastic Translucent plastic	Sleeve, pin, capacitor, motor End bell, motor Insulator, motor	A-D A-D A-D	ND	Pass
N.	Translucent plastic Light translucent plastic	Washer, motor Copper brush holder, motor	A-D A-D	ND	Pass
O.	Green plastic Translucent plastic	Commutator, motor Commutator, motor	A-D A-D	ND	Pass

Remark:

DIBP (CAS No: 84-69-5) = Diisobutyl phthalate

Results reported in percentage

ND = None detected

Detection Limit: Each Phthalate (0.005%)



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TEST RESULT

Compliance Test - European Parliament and Council Directive 2011/65/EU on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS)

Test Method : See Appendix.

Test Item(s)	Item / Component Description(s)	Location(s)	Style(s)
1	Multicolor printed grey plastic	Car	A
2	Multicolor printed black plastic	Pedestal, car	A-D
3	Multicolor printed white soft plastic	Rearview mirror	A-D
4	Silver printed transparent plastic / glue	Sticker	A-D
5	Translucent soft plastic	Glue	A-D
6	Black soft plastic	Tyre	A-D
7	Clear plastic	Washer, screw	A-D
8	Black soft plastic	Antenna, remote control	A-D
9	Silvery metal	Shaft, remote control	A-D
10	Silvery metal	Spring, remote control	A-D
11	Red printed transparent plastic	Car lamp	A-D
12	Multicolor printed light grey plastic	Car	B
13	Transparent red plastic	Car lamp	B
14	Silver / black / red printed grey plastic	Car lamp	C
15	Multicolor printed blue plastic	Car	C
16	Red printed white plastic	Wheel	C
17	Black printed orange plastic	Car	D
18	Translucent plastic	Front wheel	A-D
19	Silvery metal	Spring, front wheel	A-D
20	Silvery metal	Rivet, front wheel	A-D
21	Light black plastic	Gear	A-D
22	Silvery metal	Shaft, back wheel	A-D
23	Silvery metal	Shaft L: 11 mm	A-D
24	Silvery metal	Shaft L: 16 mm	A-D
25	Clear plastic	Sleeve, PCB	A-D
26	Brown paper / glue	Adhesive tape	A-D
27	Red soft plastic	Thin wire jacket	A-D
28	White printed black soft plastic	wire jacket	A-D
29	Red soft plastic	Wire jacket	A-D
30	White printed bright red soft plastic	wire jacket	A-D
31	White printed black soft plastic	Sleeve, wire jacket	A-D
32	Silver plated coppery metal	Wire	A-D
33	Silvery metal	Battery spring	A-D
34	Silvery metal	Battery contact plate	A-D
35	Silvery solder	Battery contact plate	A-D
36	Pink plated copper / black body	Inductor	A-D
37	Silvery metal	Pin, inductor	A-D
38	Silvery solder	Pin, inductor	A-D
39	Black plastic	Slide, slide switch	A-D



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Compliance Test - European Parliament and Council Directive 2011/65/EU on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS)

Test Method : See Appendix.

Test Item(s)	Item / Component Description(s)	Location(s)	Style(s)
40	Silvery metal	Case, slide switch	A-D
41	Silver plated golden metal	Connector, slide switch	A-D
42	Silvery metal	Spring, slide switch	A-D
43	Brown plastic	Board, slide switch	A-D
44	Silver plated golden metal	Pin, slide switch	A-D
45	Silvery solder	Pin, slide switch	A-D
46	Black plastic	Button, button switch, PCB	A-D
47	Silvery metal	Case, button switch, PCB	A-D
48	Silver plated golden metal	Connector, button switch, PCB	A-D
49	Silver plated golden metal	Pin, button switch, PCB	A-D
50	Translucent / silver body	LED, PCB	A-D
51	Silvery metal	Pin, LED, PCB	A-D
52	Black plastic	Slide, slide switch, PCB	A-D
53	Silver plated golden metal	Connector, slide switch, PCB	A-D
54	Silvery metal	Case, slide switch, PCB	A-D
55	Silvery metal	Spring, slide switch, PCB	A-D
56	Brown plastic	Board, slide switch, PCB	A-D
57	Silver plated golden metal	Pin, slide switch, PCB	A-D
58	Black body	SMD IC, PCB	A-D
59	Brown body	SMD capacitor, PCB	A-D
60	Black / white body	SMD capacitor, PCB	A-D
61	Silvery body	Crystal, PCB	A-D
62	White / black printed green coated translucent / beige plastic / coppery metal	PCB	A-D
63	Silvery solder	PCB	A-D
64	Grey printed green plastic	Sleeve, capacitor, main PCB	A-D
65	Silvery body	Capacitor, main PCB	A-D
66	Black body	Transistor, main PCB	A-D
67	Silvery body	Crystal, main PCB	A-D
68	Multicolor printed yellow body	Resistor, main PCB	A-D
69	Yellow body	Capacitor, main PCB	A-D
70	Silvery metal	Pin, capacitor, main PCB	A-D
71	White printed black soft plastic	Sleeve, pin, capacitor, main PCB	A-D
72	Black body	SMD IC, main PCB	A-D
73	Black body	SMD transistor, main PCB	A-D
74	Black / white body	SMD resistor, main PCB	A-D
75	Brown body	SMD capacitor, main PCB	A-D
76	White printed green coated brown plastic / coppery metal	Main PCB	A-D



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Compliance Test - European Parliament and Council Directive 2011/65/EU on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS)

Test Method : See Appendix.

Test Item(s)	Item / Component Description(s)	Location(s)	Style(s)
77	Silvery solder	Main PCB	A-D
78	Black soft plastic	Thin wire jacket	A-D
79	Deep beige plastic	Gear, motor	A-D
80	Translucent plastic	Gear, motor	A-D
81	Brown body	Capacitor, motor	A-D
82	Silvery metal	Pin, capacitor, motor	A-D
83	Black soft plastic	Sleeve, pin, capacitor, motor	A-D
84	Silvery metal	Case, motor	A-D
85	Silvery solder	Case, motor	A-D
86	Translucent plastic	End bell, motor	A-D
87	Black magnet	Motor	A-D
88	Silvery metal	Motor spring	A-D
89	Coppery metal	Coil, motor	A-D
90	Silvery metal	Shaft, motor	A-D
91	Golden metal	Bearing, motor	A-D
92	Silvery metal	Plate, motor	A-D
93	Translucent plastic	Insulator, motor	A-D
94	Bronze plated silvery metal	Bearing, motor	A-D
95	Translucent plastic	Washer, motor	A-D
96	Light translucent plastic	Copper brush holder, motor	A-D
97	Coppery metal	Copper brush, motor	A-D
98	Silvery solder	Copper brush, motor	A-D
99	Green plastic	Commutator, motor	A-D
100	Translucent plastic	Commutator, motor	A-D
101	Red paper	Washer, motor	A-D
102	Black core	Ring, motor	A-D
103	Coppery metal	Connector, motor	A-D
104	Silvery solder	Connector, motor	A-D
105	Silvery metal	Screw L:7 mm ϕ :4 mm	A-D
106	Bright silvery metal	Screw L:7 mm ϕ :4 mm	A-D
107	Silvery metal	Screw L:8 mm ϕ :4 mm	A-D
108	Silvery metal	Screw L:10 mm ϕ :4 mm	A-D
109	Silvery metal	Screw L:4 mm ϕ :5 mm	A-D
110	Silvery metal	Screw L:7 mm ϕ :6 mm	A-D
111	Silvery metal	Screw L:9 mm ϕ :5 mm	A-D
112	Silvery metal	Screw L:7 mm ϕ :8 mm	A-D
113	Silvery metal	Nut	A-D



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Compliance Test - European Parliament and Council Directive 2011/65/EU on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS)

Test Method : See Appendix.

See Analytes and their corresponding Maximum Allowable Limit in Appendix

-	Result						
Parameter	Lead (Pb)	Cadmium (Cd)	Mercury (Hg)	Chromium VI (Cr VI)	PBBs	PBDEs	Conclusion
Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	-
Test Item(s)	-	-	-	-	-	-	-
1	ND	ND	ND	ND	ND	ND	PASS
2	ND	ND	ND	ND	ND	ND	PASS
3	ND	ND	ND	ND	ND	ND	PASS
4	ND	ND	ND	ND	ND	ND	PASS
5	ND	ND	ND	ND	ND	ND	PASS
6	ND	ND	ND	ND	ND	ND	PASS
7	ND	ND	ND	ND	ND	ND	PASS
8	ND	ND	ND	ND	ND	ND	PASS
9	ND	ND	ND	ND	NA	NA	PASS
10	ND	ND	ND	ND	NA	NA	PASS
11	ND	ND	ND	ND	ND	ND	PASS
12	ND	ND	ND	ND	ND	ND	PASS
13	ND	ND	ND	ND	ND	ND	PASS
14	ND	ND	ND	ND	ND	ND	PASS
15	ND	ND	ND	ND	ND	ND	PASS
16	ND	ND	ND	ND	ND	ND	PASS
17	ND	ND	ND	ND	ND	ND	PASS
18	ND	ND	ND	ND	ND	ND	PASS
19	ND	ND	ND	Negative [#]	NA	NA	PASS
20	ND	ND	ND	ND	NA	NA	PASS
21	ND	ND	ND	ND	ND	ND	PASS
22	ND	ND	ND	ND	NA	NA	PASS
23	ND	ND	ND	ND	NA	NA	PASS
24	ND	ND	ND	Negative [#]	NA	NA	PASS
25	ND	ND	ND	ND	ND	ND	PASS
26	ND	ND	ND	ND	ND	ND	PASS
27	ND	ND	ND	ND	ND	ND	PASS
28	ND	ND	ND	ND	ND	ND	PASS
29	ND	ND	ND	ND	ND	ND	PASS
30	ND	ND	ND	ND	ND	ND	PASS
31	ND	ND	ND	ND	ND	ND	PASS
32	ND	ND	ND	ND	NA	NA	PASS
33	ND	ND	ND	ND	NA	NA	PASS
34	ND	ND	ND	Negative [#]	NA	NA	PASS
35	ND	ND	ND	ND	NA	NA	PASS



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Compliance Test - European Parliament and Council Directive 2011/65/EU on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS)

Test Method : See Appendix.

36	ND	ND	ND	ND	ND	ND	PASS
37	ND	ND	ND	ND	NA	NA	PASS
38	ND	ND	ND	ND	NA	NA	PASS
39	ND	ND	ND	ND	ND	ND	PASS
40	ND	ND	ND	Negative [#]	NA	NA	PASS
41	ND	ND	ND	ND	NA	NA	PASS
42	ND	ND	ND	ND	NA	NA	PASS
43	ND	ND	ND	ND	ND	ND	PASS
44	ND	ND	ND	ND	NA	NA	PASS
45	ND	ND	ND	ND	NA	NA	PASS
46	ND	ND	ND	ND	ND [#]	ND [#]	PASS
47	ND	ND	ND	ND	NA	NA	PASS
48	ND	ND	ND	ND	NA	NA	PASS
49	ND	ND	ND	ND	NA	NA	PASS
50	ND	ND	ND	ND	ND [#]	ND [#]	PASS
51	ND	ND	ND	ND	NA	NA	PASS
52	ND	ND	ND	ND	ND	ND	PASS
53	ND	ND	ND	ND	NA	NA	PASS
54	ND	ND	ND	Negative [#]	NA	NA	PASS
55	ND	ND	ND	Negative [#]	NA	NA	PASS
56	ND	ND	ND	ND	ND	ND	PASS
57	ND	ND	ND	ND	NA	NA	PASS
58	ND	ND	ND	ND	ND	ND	PASS
59	ND	ND	ND	ND	ND	ND	PASS
60	ND	ND	ND	ND	ND	ND	PASS
61	ND	ND	ND	ND	ND	ND	PASS
62	ND	ND	ND	ND	ND	ND	PASS
63	ND	ND	ND	ND	NA	NA	PASS
64	ND	ND	ND	ND	ND	ND	PASS
65	ND	ND	ND	ND	ND	ND	PASS
66	ND	ND	ND	ND	ND [#]	ND [#]	PASS
67	ND	ND	ND	ND	ND	ND	PASS
68	ND	ND	ND	ND	ND	ND	PASS
69	ND	ND	ND	ND	ND	ND	PASS
70	ND	ND	ND	ND	NA	NA	PASS
71	ND	ND	ND	ND	ND	ND	PASS
72	ND	ND	ND	ND	ND	ND	PASS
73	ND	ND	ND	ND	ND [#]	ND [#]	PASS
74	ND	ND	ND	ND	ND	ND	PASS
75	ND	ND	ND	ND	ND	ND	PASS
76	ND	ND	ND	ND	ND	ND	PASS



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Compliance Test - European Parliament and Council Directive 2011/65/EU on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS)

Test Method : See Appendix.

77	<500	ND	ND	ND	NA	NA	PASS
78	ND	ND	ND	ND	ND	ND	PASS
79	ND	ND	ND	ND	ND	ND	PASS
80	ND	ND	ND	ND	ND	ND	PASS
81	ND	ND	ND	ND	ND	ND	PASS
82	ND	ND	ND	ND	NA	NA	PASS
83	ND	ND	ND	ND	ND	ND	PASS
84	ND	ND	ND	Negative [#]	NA	NA	PASS
85	ND	ND	ND	ND	NA	NA	PASS
86	ND	ND	ND	ND	ND	ND	PASS
87	ND	ND	ND	ND	NA	NA	PASS
88	ND	ND	ND	ND	NA	NA	PASS
89	ND	ND	ND	ND	NA	NA	PASS
90	ND	ND	ND	Negative [#]	NA	NA	PASS
91	ND	ND	ND	ND	NA	NA	PASS
92	ND	ND	ND	Negative [#]	NA	NA	PASS
93	ND	ND	ND	ND	ND	ND	PASS
94	ND	ND	ND	ND	NA	NA	PASS
95	ND	ND	ND	ND	ND	ND	PASS
96	ND	ND	ND	ND	ND	ND	PASS
97	ND	ND	ND	ND	NA	NA	PASS
98	ND	ND	ND	ND	NA	NA	PASS
99	ND	ND	ND	ND	ND	ND	PASS
100	ND	ND	ND	ND	ND	ND	PASS
101	ND	ND	ND	ND	ND	ND	PASS
102	ND	ND	ND	ND	ND	ND	PASS
103	ND	ND	ND	ND	NA	NA	PASS
104	<500	ND	ND	ND	NA	NA	PASS
105	ND	ND	ND	Negative [#]	NA	NA	PASS
106	ND	ND	ND	Negative [#]	NA	NA	PASS
107	ND	ND	ND	ND	NA	NA	PASS
108	ND	ND	ND	ND	NA	NA	PASS
109	ND	ND	ND	ND	NA	NA	PASS
110	ND	ND	ND	ND	NA	NA	PASS
111	ND	ND	ND	ND	NA	NA	PASS
112	ND	ND	ND	ND	NA	NA	PASS
113	ND	ND	ND	Negative [#]	NA	NA	PASS



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TEST RESULT

Note / Key :

ND = Not detected

NR = Not requested

% = percent

Detection Limit : See Appendix.

">" = Greater than

mg/kg = milligram(s) per kilogram = ppm = part(s) per million

10 000 mg/kg = 1 %

Remark :

- The testing approach is listed in table of Appendix.
- # denotes as reported result(s) was (were) performed by wet chemistry method. Others were screened by XRF. For XRF screening, the result(s) of Cr VI was (were) reported as total chromium and the result(s) of PBBs and PBDEs was (were) reported as total bromine. Also, the XRF result(s) may be different to the actual content based on various factors including, but not limit to, sample size, thickness, area, non-uniformity composition, surface flatness.
- Only selected example(s) is (are) indicated on the photograph(s) in Comment.
- According to European Parliament and Council Directive 2011/65/EU, Article 5 "Adaptation of the Annexes to scientific and technical progress", exemption(s) should be granted to the materials and components of Test Item(s) in the lists in Annexes III and IV of this directive.



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TEST RESULT

Phthalates Test – Directive 2015/863/EU Amendment of European Parliament and Council Directive 2011/65/EU on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS)

Test Method : With reference to International Standard IEC 62321-8.

Test Item(s)	Item / Component Description(s)	Location(s)	Style(s)
1	Multicolor printed grey plastic	Car	A
2	Multicolor printed black plastic	Pedestal, car	A-D
3	Multicolor printed white soft plastic	Rearview mirror	A-D
4	Silver printed transparent plastic / glue	Sticker	A-D
5	Translucent soft plastic	Glue	A-D
6	Black soft plastic	Tyre	A-D
7	Clear plastic	Washer, screw	A-D
8	Black soft plastic	Antenna, remote control	A-D
11	Red printed transparent plastic	Car lamp	A-D
12	Multicolor printed light grey plastic	Car	B
13	Transparent red plastic	Car lamp	B
14	Silver / black / red printed grey plastic	Car lamp	C
15	Multicolor printed blue plastic	Car	C
16	Red printed white plastic	Wheel	C
17	Black printed orange plastic	Car	D
18	Translucent plastic	Front wheel	A-D
21	Light black plastic	Gear	A-D
25	Clear plastic	Sleeve, PCB	A-D
27	Red soft plastic	Thin wire jacket	A-D
28	White printed black soft plastic	wire jacket	A-D
29	Red soft plastic	Wire jacket	A-D
30	White printed bright red soft plastic	wire jacket	A-D
31	White printed black soft plastic	Sleeve, wire jacket	A-D
39	Black plastic	Slide, slide switch	A-D
43	Brown plastic	Board, slide switch	A-D
46	Black plastic	Button, button switch, PCB	A-D
50	Translucent body	LED, PCB	A-D
52	Black plastic	Slide, slide switch, PCB	A-D
56	Brown plastic	Board, slide switch, PCB	A-D
62	White / black printed green coated translucent / beige plastic	PCB	A-D
64	Grey printed green plastic	Sleeve, capacitor, main PCB	A-D
71	White printed black soft plastic	Sleeve, pin, capacitor, main PCB	A-D
76	White printed green coated brown plastic	Main PCB	A-D
78	Black soft plastic	Thin wire jacket	A-D
79	Deep beige plastic	Gear, motor	A-D
80	Translucent plastic	Gear, motor	A-D



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Test Method : With reference to International Standard IEC 62321-8.

Test Item(s)	Item / Component Description(s)	Location(s)	Style(s)
83	Black soft plastic	Sleeve, pin, capacitor, motor	A-D
86	Translucent plastic	End bell, motor	A-D
93	Translucent plastic	Insulator, motor	A-D
95	Translucent plastic	Washer, motor	A-D
96	Light translucent plastic	Copper brush holder, motor	A-D
99	Green plastic	Commutator, motor	A-D
100	Translucent plastic	Commutator, motor	A-D

Maximum Allowable Limit:	DEHP, BBP, DBP & DIBP: 0.1% (Each)
---------------------------------	---

Tested Item(s)	Result			Conclusion
	Detected Analyte(s)	Conc.	Unit	
1+2+3	ND	ND	%	PASS
4+5+6	ND	ND	%	PASS
7+8+11	ND	ND	%	PASS
12+13+14	ND	ND	%	PASS
15+16+17	ND	ND	%	PASS
18+21+25	ND	ND	%	PASS
27+28+29	ND	ND	%	PASS
30+31+39	ND	ND	%	PASS
43+46+50	ND	ND	%	PASS
52+56+62	ND	ND	%	PASS
64+71+76	ND	ND	%	PASS
78+79+80	ND	ND	%	PASS
83+86+93	ND	ND	%	PASS
95+96	ND	ND	%	PASS
99+100	ND	ND	%	PASS

Note / Key :

ND = Not detected

NR = Not requested

% = percent

Detection Limit (%) : 0.005

“>” = Greater than

mg/kg = milligram(s) per kilogram = ppm = part(s) per million

10 000 mg/kg = 1 %

Remark : The list of phthalates is summarized in table of Appendix.

TEST RESULT

Comment :

Photograph(s) [Compliance Test for European Parliament and Council Directive 2011/65/EU] :

Photograph of Test Item(s)



END



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TEST RESULT

APPENDIX

List of Analytes and their Corresponding Test Methods, Detection Limit and Maximum Allowable Limit [Compliance Test for European Parliament and Council Directive 2011/65/EU] :						
No.	Name of Analytes	Detection Limit (mg/kg)				Maximum Allowable Limit (mg/kg)
		X-ray fluorescence (XRF) ^[a]			Wet Chemistry	
		Plastic	Metallic / glass / ceramic	Others		
1	Lead (Pb)	100	200	200	10 ^[b]	1 000
2	Cadmium (Cd)	50	50	50	10 ^[b]	100
3	Mercury (Hg)	100	200	200	10 ^[c]	1 000
4	Chromium (Cr)	100	200	200	NA	NA
5	Chromium VI (Cr VI)	NA	NA	NA	3 ^[g, h] / 10 ^[d] / See ^[e, j]	1 000 / Negative ^[j]
6	Bromine (Br)	200	NA	200	NA	NA
7	Polybromobiphenyls (PBBs) - Bromobiphenyl (MonoBB) - Dibromobiphenyl (DiBB) - Tribromobiphenyl (TriBB) - Tetrabromobiphenyl (TetraBB) - Pentabromobiphenyl (PentaBB) - Hexabromobiphenyl (HexaBB) - Heptabromobiphenyl (HeptaBB) - Octabromobiphenyl (OctaBB) - Nonabromobiphenyl (NonaBB) - Decabromobiphenyl (DecaBB)	NA	NA	NA	Each 50 ^[f]	Sum 1 000
8	Polybromodiphenyl ethers (PBDEs) - Bromodiphenyl ether (MonoBDE) - Dibromodiphenyl ether (DiBDE) - Tribromodiphenyl ether (TriBDE) - Tetrabromodiphenyl ether (TetraBDE) - Pentabromodiphenyl ether (PentaBDE) - Hexabromodiphenyl ether (HexaBDE) - Heptabromodiphenyl ether (HeptaBDE) - Octabromodiphenyl ether (OctaBDE) - Nonabromodiphenyl ether (NonaBDE) - Decabromodiphenyl ether (DecaBDE)	NA	NA	NA	Each 50 ^[f]	Sum 1 000



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	NA = Not applicable
[a]	Test method with reference to International Standard IEC 62321-3-1: 2013.
[b]	Test method with reference to International Standard IEC 62321-5: 2013.
[c]	Test method with reference to International Standard IEC 62321-4: 2017.
[d]	Polymers and Electronics - Test method with reference to European Standard EN 62321-7-2: 2017.
[e]	Metal - Test method with reference to International Standard IEC 62321-7-1: 2015 ^[i] .
[f]	Test method with reference to International Standard IEC 62321-6: 2015.
[g]	Leather - Test method International Standard ISO 17075: 2007.
[h]	Other Than Metal, Leather, Polymers and Electronics - Test method with reference to International Standard ISO 17075: 2007.
[i]	The principle of this method was evaluated and supported by two studies organized by IEC TC 111 WG3. These studies were focused on detecting the presence of Cr VI in the corrosion protection coatings on metallic samples. Result(s) of Cr VI for metallic material(s) was (were) expressed in term of positive and negative. Negative means the absence of Cr VI on the tested areas and the result(s) was (were) regarded as in compliance with European Parliament and Council Directive 2011/65/EU, Article 4(1). While, positive means the presence of Cr VI on tested areas and the result(s) was (were) regarded as in conflict with European Parliament and Council Directive 2011/65/EU, Article 4(1).
[j]	

Testing Approach [Compliance Test for European Parliament and Council Directive 2011/65/EU] :

The testing approach was with reference to the following document(s).

- 1 International Standards IEC 62321-1: 2013 and IEC 62321-2: 2013
- 2 "RoHS Enforcement Guidance Document Version 1" by EU RoHS Enforcement Authorities Informal Network. (May 2006)
- 3 "RoHS Regulations - Government Guidance Notes" by United Kingdom Department for Business Innovation & Skills. (February 2011)
- 4 "Final Report to RoHS substances (Hg, Pb, Cr(VI), Cd, PBB and PBDE) in electrical and electronic equipment in Belgium" by Belgium Federal Public Service Health, Food Chain Safety and Environment. (November 2005)

List of Phthalates:

No.	Name of Analytes	CAS-No.	No.	Name of Analytes	CAS-No.
1	Bis(2-ethylhexyl) phthalate (DEHP)	117-81-7	3	Dibutyl phthalate (DBP)	84-74-2
2	Butyl benzyl phthalate (BBP)	85-68-7	4	Diisobutyl phthalate (DIBP)	84-69-5

TEST RESULT



Sample Number
85190600484A1



Sample Number
85190600484B1



Sample Number
85190600484C1



Sample Number
85190600484D1

END OF REPORT