

Date:

Feb 27, 2017

DONGGUAN LIYANG TOYS LTD. Applicant:

Floor 3, Building 2, Daxingwei Industry

Xianxi, Wusha, Changan Town, Dongguan City, Guangdong Province

Attn: 陈效

Sample Description:

Six (6) pieces of submitted sample said to be : Item Name Mr.Skin.

Item No. BL-10033,BL11333.

Reference No. BL-11335,BL-10093,BL-10123,BL-11313,BL-11323,BL-10073,BL-11343,BL-11353,BL-11363,BL-11383,BL-11345,BL-11355,BL-11373,BL-15103,10030.

Applicant Specified Age

Grading for Testing Date Sample Received

Sep 13, 2016.& Feb 22, 2017



Tests conducted:

As requested by the applicant, refer to attached page(s) for details.

To be continued

Authorized by:

For Intertek Testing Services

Shenzhen Ltd.

Ben N.L. Lin General Manager

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Conclusion:

Tested Sample Tested components of submitted samples

Standard Consent Judgment No. RG- 356892 for total Lead content based on the

California Proposition 65

Result See test conducted

Screening by XRF spectroscopy and chemical confirmation test for RoHS

Directive 2011/65/EU

Pass

Authorized by: For Intertek Testing Services Shenzhen Ltd.

Ben N.L. Lin General Manager

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Tests Conducted

1 **Total Lead Content**

Acid digestion method was used and total Lead content was determined by Inductively Coupled Argon Plasma Spectrometry.

	Result (mg/kg)		
	Tested Component	Reporting	<u>Limit</u>
<u>Element</u>	(1+2+3),(4+5),(6+7),(8+9)	<u>Limit</u> (mg/kg)	(mg/kg)
Lead (Pb)	ND	10	100

ND = Not detected

The above limit was referred to the Consent Judgment No. RG- 356892 settled by superior court of the State of California for the county of Alameda, for toys based on the California Proposition 65.

Tested Components

- Black plastic (body of #BL-11335).
- (2) (3) Semi-transparent plastic (ring of both styles).
- Transparent black plastic (bottom of #BL-11335). Flesh color plastic (body of #BL-10033).
- Flesh color plastic (bottom of #BL-10033).
- Silver color metal (screw of bottom of both styles). Silver color metal (battery contact plate of end cap of both styles).
- Gold color metal (eyelet of end cap of both styles).
- Gold color metal (battery contact part of body of both styles).



Tests Conducted

2 **RoHS Chemical Test**

(A) Screening Test by XRF Spectroscopy

Cadmium (Cd), Lead (Pb), Mercury (Hg), Chromium (Cr) and Bromine (Br) content were measured with reference to IEC 62321-3-1 Edition 1.0: 2013 by XRF spectroscopy and chemical confirmation test for RoHS restricted substances.

Screened Components		XRF Results	Chemical Confirmation Result
	Cd	ND	
	Pb	ND	
1	Hg	ND	NT
	Cr	ND	
	Br	ND	
	Cd	ND	
	Pb	ND	
2	Hg	ND	NT
	Cr	ND	
	Br	ND	
	Cd	ND	
	Pb	ND	
3	Hg	ND	NT
	Cr	ND	
	Br	ND	
	Cd	ND	
	Pb	ND	
4	Hg	ND	NT
	Cr	ND	
	Br	NT	





Tests Conducted

Screened Components		XRF Results	Chemical Confirmation Result
	Cd	ND	
	Pb	ND	
5a	Hg	ND	NT
	Cr	ND	
	Br	ND	
	Cd	ND	
	Pb	ND	
5b	Hg	ND	NT
	Cr	ND	
	Br	NT	
	Cd	ND	
	Pb	ND	
6	Hg	ND	NT
	Cr	ND	
	Br	ND	
	Cd	ND	
	Pb	ND	
7	Hg	ND	NT
	Cr	ND	
	Br	ND	
	Cd	ND	
	Pb	ND	
8	Hg	ND	NT
	Cr	ND	
	Br	ND	



Tests Conducted

Screened Components		XRF Results	Chemical Confirmation Result
	Cd	ND	
	Pb	ND	
9	Hg	ND	Cr ⁶⁺ :Negative(<0.10μg/cm ²)
	Cr	Inconclusive	
	Br	NT	
	Cd	ND	
	Pb	ND	
10	Hg	ND	NT
	Cr	ND	
	Br	NT	
	Cd	ND	
	Pb	ND	
11	Hg	ND	NT
	Cr	ND	
	Br	NT	
	Cd	ND	
	Pb	ND	
12	Hg	ND	NT
	Cr	ND	
	Br	NT	
	Cd	ND	
	Pb	ND	
13	Hg	ND	NT
	Cr	ND	
	Br	NT	*****



Tests Conducted

Screened Components	XRF Results		Chemical Confirmation Result
	Cd	ND	
	Pb	ND	
14	Hg	ND	Cr ⁶⁺ :Negative(<0.10µg/cm ²)
	Cr	Inconclusive	
	Br	NT	
	Cd	ND	
	Pb	ND	
15	Hg	ND	NT
	Cr	ND	
	Br	NT	
	Cd	ND	
	Pb	ND	
16a	Hg	ND	NT
	Cr	ND	
	Br	NT	
	Cd	ND	
	Pb	ND	
16b	Hg	ND	NT
	Cr	ND	
	Br	NT	
	Cd	ND	
	Pb	ND	
16c	Hg	ND	NT
	Cr	ND	
	Br	ND	

Number:

SZHH0109202801



Tests Conducted

Number: SZHH0109202801

Screened Components		XRF Results	Chemical Confirmation Result
	Cd	ND	
	Pb	ND	
16d	Hg	ND	NT
	Cr	ND	
	Br	NT	
	Cd	ND	
	Pb	ND	
16e	Hg	ND	NT
	Cr	ND	
	Br	NT	
	Cd	ND	
	Pb	ND	
16f	Hg	ND	NT
	Cr	ND	
	Br	NT	
	Cd	ND	
	Pb	ND	
16g	Hg	ND	NT
	Cr	ND	
	Br	NT	
	Cd	ND	
	Pb	ND	
16h	Hg	ND	NT
	Cr	ND	
	Br	ND	

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Tests Conducted

Screened Components	XRF Results		Chemical Confirmation Result
	Cd	ND	
	Pb	ND	
16i	Hg	ND	NT
	Cr	ND	
	Br	ND	
	Cd	ND	
	Pb	ND	
16j	Hg	ND	NT
	Cr	ND	
	Br	ND	
	Cd	ND	
	Pb	ND	
16k	Hg	ND	Cr ⁶⁺ :Negative(<0.10µg/cm ²)
	Cr	Inconclusive	
	Br	NT	
	Cd	ND	
	Pb	ND	
161	Hg	ND	NT
	Cr	ND	
	Br	ND	
	Cd	ND	
	Pb	ND	
16m	Hg	ND	NT
	Cr	ND	
	Br	ND	



Tests Conducted

Number: SZHH0109202801

Screened Components	XRF Results		Chemical Confirmation Result
	Cd	ND	
	Pb	ND	
16n	Hg	ND	Cr ⁶⁺ :ND(<1mg/kg)
	Cr	Inconclusive	
	Br	NT	
	Cd	ND	
	Pb	ND	
160	Hg	ND	NT
	Cr	ND	
	Br	ND	
	Cd	ND	
	Pb	ND	
16p	Hg	ND	NT
	Cr	ND	
	Br	NT	
	Cd	ND	
	Pb	ND	
16q	Hg	ND	NT
	Cr	ND	
	Br	ND	
	Cd	ND	
	Pb	ND	
16r	Hg	ND	NT
	Cr	ND	
	Br	NT	

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Tests Conducted

Number: SZHH0109202801

Screened Components	XRF Results		Chemical Confirmation Result
	Cd	ND	
	Pb	ND	
16s	Hg	ND	NT
	Cr	ND	
	Br	NT	
	Cd	ND	
	Pb	ND	
17	Hg	ND	NT
	Cr	ND	
	Br	ND	
	Cd	ND	
	Pb	ND	
18	Hg	ND	NT
	Cr	ND	
	Br	ND	

ND = Not detected NT = Not tested

Positive = A positive test result indicated the concentration of Cr(VI) is greater than threshold of $0.13 \mu g/cm^2$ for boiling-water-extraction procedures by visual comparison / by UV-VIS Spectrophotometer analysis. The sample coating is considered to contain Cr(VI).

Negative = A negative test result indicated the concentration of Cr(VI) is less than threshold of $0.10 \mu g/cm^2$ for boiling-water-extraction procedures by UV-VIS Spectrophotometer analysis. The coating is considered a non-Cr(VI) based coating.

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Tests Conducted

(B) XRF Screening Limits in mg/kg for Regulated Elements in Various Matrices

Element	Polymer Materials	Metallic Materials	Composite Materials
Cd	P ≤70 < X < 130 ≤ F	P ≤ 70 < X < 130 ≤ F	P ≤ 70 < X < 150 ≤ F
Pb	P ≤ 700 < X < 1300≤ F	P ≤ 700 < X < 1300 ≤ F	P ≤ 500< X < 1500 ≤ F
Hg	P ≤ 700< X < 1300 ≤ F	P ≤ 700 < X < 1300 ≤ F	P ≤ 500 < X < 1500 ≤ F
Cr	P ≤ 700< X	P ≤ 700 < X	P ≤ 500 < X
Br	P ≤ 300< X	Not applicable	P ≤ 250 < X

P = Pass

X = Inconclusive result

F = Fail

mg/kg = milligram per kilogram = ppm

(C) Estimated Detection Limits in mg/kg for Regulated Elements in Various Matrices

Element	Polymer Materials	Metallic Materials	Composite Materials
Cd	50	70	70
Pb	100	200	200
Hg	100	200	200
Cr	100	200	200
Br	200	Not applicable	200

Disclaimers:

This XRF Screening and Chemical Confirmation Test Report is for reference purposes only. The applicant shall make its/his/her own judgment as to whether the information provided in this XRF Screening and Chemical Confirmation Test Report is sufficient for its/his/her purposes.

The results shown in this XRF Screening and Chemical Confirmation Test Report will differ based on various factors, including but not limited to, the sample size, thickness, area, surface flatness, equipment parameters and matrix effect (e.g. plastic, rubber, metal, glass, ceramic etc.). Further wet chemical pre-treatment with relevant chemical equipment analysis is required to obtain quantitative data.





Tests Conducted

(D) Chemical Confirmation Test Methods:

Testing Item	•	Reporting Limit
Chromium (VI) (Cr ⁶⁺) Content	With reference to IEC 62321-7-1 Edition 1.0:2015, by boiling water extraction and determined by UV-VIS Spectrophotometer	0.10µg/cm ²
Chromium (VI)(Cr ⁶⁺) Content	With reference to IEC 62321 Edition 1.0:2008, by alkaline digestion and determined by UV-VIS Spectrophotometer	1 mg/kg

(E) RoHS Requirement:

Restricted Substances	Limits
Cadmium (Cd)	0.01% (100 mg/kg)
Lead (Pb)	0.1% (1000 mg/kg)
Mercury (Hg)	0.1% (1000 mg/kg)
Chromium (VI) (Cr ⁸⁺)	0.1% (1000 mg/kg)
Polybrominated Biphenyls (PBBs)	0.1% (1000 mg/kg)
Polybrominated Diphenyl Ethers (PBDEs)	0.1% (1000 mg/kg)

Tested Components:

- Black plastic.
- 2 Cream plastic.
- 3 Transparent black plastic.
- 4 Gold color metal.
- 5 Wire.
 - (a) Transparent plastic (wire covering).
 - (b) Silver color metal.
- 6 Sémi-transparent plastic.
- 7 Semi-transparent plastic.
- 8 Black plastic.
- 9 Dull silver color metal (spring).
- 10 Silver color metal (spring).
- Silver color metal (screw). 11
- 12 Gold color metal.
- 13 Copper color metal.
- 14 Silver color metal
- Gold color metal (eyelet). 15

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Tests Conducted

Tested Components:

- 16 Motor
 - (a) Silver color metal (case).
 - (b) Copper color metal (washer).
 - (c) Black magnet with white coating.
 - (d) Dull silver-grey metal. (e) Black plated metal.

 - (f) Gold color metal with solder.
 - (g) Copper color metal.
 - (h) Transparent cream plastic.
 - (i) White plastic (washer).
 - (j) White plastic (washer).

 - (k) Silver-grey metal.(l) Copper color enamelled wire.
 - (m) White plastic.
 - (n) Black magnet with silver color metal & solder.
 - (o) Dull cream plastic.
 - (p) Copper color metal.
 - (q) Red paper (washer).
 - (r) Gold color metal (washer).
 - (s) Silver color metal (axle).
- 17 Flesh color plastic.
- 18 Flesh color plastic.



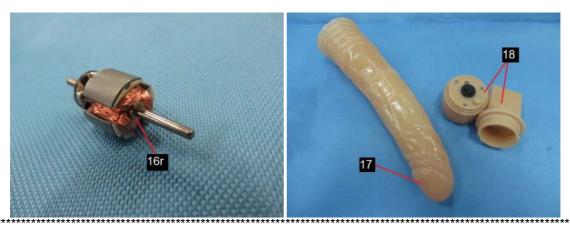
Tests Conducted





Tests Conducted

Number: SZHH0109202801



End of report

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