



STC TEST REPORT

Date: 2015-07-27

Page 1 of 25

No.: SP118899

Applicant : Wiggles 3D Incorporated
1124 Gainsborough Road, Suite 9
London ON Canada N6H5N1
Attn: Peter Nesbitt

Supplier : WONBON

Date Samples Received : 2015-07-14

Date Tested : 2015-07-14 to 2015-07-23

Description of Sample : One (1) piece of submitted sample said to be:
BELLZ WINDOW BOX
STYLE NO.: 21070
COUNTRY OF ORIGIN: CHINA
COUNTRY OF DESTINATION:
ITALY,FINLAND,SWEDEN,GERMANY,AUSTRIA,
SWITZERLAND,USA,CANADA,RUSSIA
AGE GRADING FOR TESTING: 6+

HE Lijie, Bill
Toys and Children's Products Department
For and on behalf of
STC(Shanghai) Company Limited



STC (Shanghai) Company Limited

No.130, Huashen Road, Waigaoqiao Free Trade Zone, Shanghai, China (Zip code: 200131)
Tel: (86 21) 52198248 Fax: (86 21) 52198249 Homepage:www.shstc.org Email:shstc@shstc.org
This report shall not be reproduced unless with prior written approval from STC (Shanghai) Company Limited.
For conditions of Issuance of this test report, Please refer to the overleaf or homepage
Please refer to the original test report as this e-report is for reference only!



STC TEST REPORT

Date: 2015-07-27

Page 2 of 25

No.: SP118899

Requirements	Conclusion
1. ASTM Standard Consumer Safety Specification For Toy Safety F 963-11 - physical and mechanical test - flammability test - heavy metal test	Pass
2. US Consumer Product Safety Improvement Act - Total Lead content in paint and surface coating in accordance with Sec. 101 (f) and 16 CFR 1303. - Total Lead content in substrate in accordance with Sec. 101(a). - Phthalates content in accordance with Sec 108.	Pass
3. The Total Lead content requirements according to the California Proposition 65	Pass
4. The BBP, DBP, DEHP, DnHP and DIDP content requirements according to the California Proposition 65.	Pass
5. The Total Lead content requirements according to Illinois Public Act 095-1019	Pass
6. The Phthalates content requirements according to California Assembly Bill NO.1108.	Pass
7. San Francisco Health Code - Phthalates content in accordance with Article 34, sec 34.2	Pass
8. Toys Regulations SOR/2011-17 under Canada Consumer Product Safety Act - Physical and Mechanical tests (Apart from clause 3) - Flammability tests - Toxic element analysis in surface coating - Phthalates content	Pass
9. Consumer Products Containing Lead (Contact with mouth) Regulations SOR/2010-273 - Total lead content in mouth-contact articles	Pass
10. European Standard for Safety of Toys - EN71-1:2014, mechanical and physical properties - EN71-2:2011+A1:2014, flammability - EN71-3:2013+A1:2014, migration of certain elements	Pass
11. Phthalates content -Annex XVII Item 51 & 52 of the REACH Regulation (EC) No. 1907/2006	Pass
12. Total cadmium content-Annex XVII Item 23 of the REACH Regulation (EC) No. 1907/2006 and amendment NO.835/2012	Pass
13. Banned AZO dye-Annex XVII Item 43 of the REACH Regulation (EC) No. 1907/2006	Pass
14. Nickel Release content-Annex XVII Item 27(b) of the REACH Regulation (EC) No. 1907/2006	Pass

STC (Shanghai) Company Limited

No.130, Huashen Road, Waigaoqiao Free Trade Zone, Shanghai, China (Zip code: 200131)

Tel: (86 21) 52198248 Fax: (86 21) 52198249 Homepage:www.shstc.org Email:shstc@shstc.org

This report shall not be reproduced unless with prior written approval from STC (Shanghai) Company Limited.

For conditions of Issuance of this test report, Please refer to the overleaf or homepage

Please refer to the original test report as this e-report is for reference only!



STC TEST REPORT

Date: 2015-07-27

Page 3 of 25

No.: SP118899

TEST RESULTS:

1. ASTM Standard Consumer Safety Specification for Toy Safety F 963-11

AGE GRADING:

The sample was appropriately age graded with the marking of “ 6+ ”.

AGE GRADING FOR TESTING:

72 months and up.

1.1 Mechanical and physical hazards of the submitted sample

Ref.: ASTM F 963-11

Applicable requirements before and after use and abuse testing:

<u>Applicable Section</u>	<u>Description</u>	<u>Result</u>
4	<u>Safety requirements</u>	----
4.1	Material Quality	Pass
4.2	Flammability	Pass* ¹
4.7	Accessible Edges	Pass
4.9	Accessible Points	Pass
4.38	Magnets	Pass
5	<u>Labeling Requirements</u>	----
5.2	Age grading Labeling	* ²
7	<u>Producer's Markings</u>	----
7.1	Producer's Name and Address	Pass

*¹ = Please refer to section 1.2 of this report for details.

*² = See age grading.

<u>Applicable Section</u>	<u>Description</u>	<u>Test Condition</u>
8.5	Normal Use Testing	
8.6	Abuse Testing	
8.7	Drop Tests	4 drops at 3 ft
8.8	Torque Tests	4 in-lbs or $\pm 180^\circ$
8.9	Tension Tests	15 lbs.
8.10	Compression Tests	30 lbs.

1.2 Flammability test for solids and soft toys

Ref.: ASTM F 963-11 Section 4.2

Method used: FHSA 16 CFR 1500.44

Result: Pass

<u>Sample</u>	<u>Burn rate (in/sec.)</u>
BELLZ GAME	DNI

DNI = Did not ignite

Note: The burning rate should not be greater than 0.1 inch per second.

STC (Shanghai) Company Limited

No.130, Huashen Road, Waigaoqiao Free Trade Zone, Shanghai, China (Zip code: 200131)

Tel: (86 21) 52198248 Fax: (86 21) 52198249 Homepage: www.shstc.org Email: shstc@shstc.org

This report shall not be reproduced unless with prior written approval from STC (Shanghai) Company Limited.

For conditions of Issuance of this test report, Please refer to the overleaf or homepage

Please refer to the original test report as this e-report is for reference only!



STC TEST REPORT

Date: 2015-07-27

Page 4 of 25

No.: SP118899

TEST RESULTS:

1.3 Heavy element

Ref.: ASTM F963-11 Section 4.3.5

Method: ASTM F963-11 Section 8.3

Determined by: Inductively Coupled Plasma-Optical Emission Spectrometer

4.3.5.1 Paint and similar surface-coating

Total lead analysis

Coating material

- (1) Coating on zipper head: black
Coating on bell: green
Coating on bell: light blue
- (2) Coating on bell: purple
Coating on bell: orange

Sample	Result	Limit
(1)	<10ppm	90ppm
(2)	<10ppm	90ppm

Soluble metals test

Coating material

- (1) Coating on zipper head: black*³
- (2) Coating on bell: green*⁴
- (3) Coating on bell: light blue*⁴
- (4) Coating on bell: purple*⁴
- (5) Coating on bell: orange*⁴

*³ = The surface coating is less than 10mg, so it is not necessary to conduct the test according to the standard.

*⁴ = There were insufficient materials to produce the test portion of 100 mg in one sample. According to the Standard, the quantities of the elements were calculated as if 100 mg of test portion had been used. The actual weight of the specified materials used for analysis were shown below :

- (2) Coating on bell: green(69.9mg)
- (3) Coating on bell: light blue(20.6mg)
- (4) Coating on bell: purple(12.8mg)
- (5) Coating on bell: orange(55.9mg)

	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>Limit</u>
Soluble lead.....	<5ppm	<5ppm	<5ppm	<5ppm	90ppm
Soluble cadmium.....	<5ppm	<5ppm	<5ppm	<5ppm	75ppm
Soluble chromium.....	<5ppm	<5ppm	<5ppm	<5ppm	60ppm
Soluble barium.....	<5ppm	<5ppm	<5ppm	<5ppm	1000ppm
Soluble antimony.....	<5ppm	<5ppm	<5ppm	<5ppm	60ppm
Soluble arsenic.....	<2ppm	<2ppm	<2ppm	<2ppm	25ppm
Soluble mercury.....	<5ppm	<5ppm	<5ppm	<5ppm	60ppm
Soluble selenium.....	<5ppm	<5ppm	<5ppm	<5ppm	500ppm

STC (Shanghai) Company Limited

No.130, Huashen Road, Waigaoqiao Free Trade Zone, Shanghai, China (Zip code: 200131)

Tel: (86 21) 52198248 Fax: (86 21) 52198249 Homepage:www.shstc.org Email:shstc@shstc.org

This report shall not be reproduced unless with prior written approval from STC (Shanghai) Company Limited.

For conditions of Issuance of this test report, Please refer to the overleaf or homepage

Please refer to the original test report as this e-report is for reference only!



STC TEST REPORT

Date: 2015-07-27

Page 5 of 25

No.: SP118899

TEST RESULTS:

4.3.5.2 Toys Substrate Materials

Total lead test

Plastic material

- (1) Zipper tooth: black
Plastic of hand shank: orange
- (2) Film on hand shank: transparent with multicolour print

Rubber material

- (3) Rubber: white
Rubber: light blue

Metal material

- (4) Metal in rubber: silver
Zipper head(substrate):silver
Bell(substrate): silver

<u>Sample</u>	<u>Result</u>	<u>Limit</u>
(1)	<10ppm	100ppm
(2)	<10ppm	100ppm
(3)	<10ppm	100ppm
(4)	<10ppm	100ppm

Soluble metals test:

Plastic material

- (1) Zipper tooth: black
- (2) Plastic of hand shank: orange
- (3) Film on hand shank: transparent with multicolour print

Rubber material

- (4) Rubber : white*⁶
- (5) Rubber : light blue

Metal material

- (6) Metal in rubber: silver
- (7) Zipper head (substrate): silver *⁵
- (8) Bell(substrate): silver (Big)
- (9) Bell(substrate): silver (small)

Textile material

- (10) Fabric: black
- (11) Fabric of the rope: black
- (12) Fabric: multicolour

STC (Shanghai) Company Limited

No.130, Huashen Road, Waigaoqiao Free Trade Zone, Shanghai, China (Zip code: 200131)

Tel: (86 21) 52198248 Fax: (86 21) 52198249 Homepage:www.shstc.org Email:shstc@shstc.org

This report shall not be reproduced unless with prior written approval from STC (Shanghai) Company Limited.

For conditions of Issuance of this test report, Please refer to the overleaf or homepage

Please refer to the original test report as this e-report is for reference only!



STC TEST REPORT

Date: 2015-07-27

Page 6 of 25

No.: SP118899

TEST RESULTS:

*5 = According to requirement of ASTM F963-11, materials such as metal, glass, and ceramic are exempted if they are not small parts.

*6 = There were insufficient materials to produce the test portion of 100 mg in one sample. According to the Standard, the quantities of the elements were calculated as if 100 mg of test portion had been used. The actual weight of the specified materials used for analysis were shown below :

(4) Rubber : white (29.6mg)

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>Limit</u>
Soluble lead.....	<5ppm	<5ppm	<5ppm	<5ppm	90ppm
Soluble cadmium.....	<5ppm	<5ppm	<5ppm	<5ppm	75ppm
Soluble chromium.....	<5ppm	<5ppm	<5ppm	<5ppm	60ppm
Soluble barium.....	<5ppm	<5ppm	<5ppm	<5ppm	1000ppm
Soluble antimony.....	<5ppm	<5ppm	<5ppm	<5ppm	60ppm
Soluble arsenic.....	<2ppm	<2ppm	<2ppm	<2ppm	25ppm
Soluble mercury.....	<5ppm	<5ppm	<5ppm	<5ppm	60ppm
Soluble selenium.....	<5ppm	<5ppm	<5ppm	<5ppm	500ppm

	<u>5</u>	<u>6</u>	<u>8</u>	<u>9</u>	<u>Limit</u>
Soluble lead.....	<5ppm	<5ppm	<5ppm	<5ppm	90ppm
Soluble cadmium.....	<5ppm	<5ppm	<5ppm	<5ppm	75ppm
Soluble chromium.....	<5ppm	<5ppm	<5ppm	<5ppm	60ppm
Soluble barium.....	<5ppm	<5ppm	<5ppm	<5ppm	1000ppm
Soluble antimony.....	<5ppm	<5ppm	<5ppm	<5ppm	60ppm
Soluble arsenic.....	<2ppm	<2ppm	<2ppm	<2ppm	25ppm
Soluble mercury.....	<5ppm	<5ppm	<5ppm	<5ppm	60ppm
Soluble selenium.....	<5ppm	<5ppm	<5ppm	<5ppm	500ppm

	<u>10</u>	<u>11</u>	<u>12</u>	<u>Limit</u>
Soluble lead.....	<5ppm	<5ppm	<5ppm	90ppm
Soluble cadmium.....	<5ppm	<5ppm	<5ppm	75ppm
Soluble chromium.....	<5ppm	<5ppm	<5ppm	60ppm
Soluble barium.....	<5ppm	<5ppm	<5ppm	1000ppm
Soluble antimony.....	<5ppm	<5ppm	<5ppm	60ppm
Soluble arsenic.....	<2ppm	<2ppm	<2ppm	25ppm
Soluble mercury.....	<5ppm	<5ppm	<5ppm	60ppm
Soluble selenium.....	<5ppm	<5ppm	<5ppm	500ppm

Note: < denotes less than

STC (Shanghai) Company Limited

No.130, Huashen Road, Waigaoqiao Free Trade Zone, Shanghai, China (Zip code: 200131)

Tel: (86 21) 52198248 Fax: (86 21) 52198249 Homepage:www.shstc.org Email:shstc@shstc.org

This report shall not be reproduced unless with prior written approval from STC (Shanghai) Company Limited.

For conditions of Issuance of this test report, Please refer to the overleaf or homepage

Please refer to the original test report as this e-report is for reference only!



STC TEST REPORT

Date: 2015-07-27

Page 7 of 25

No.: SP118899

TEST RESULTS:

2. US Consumer Product Safety Improvement Act

2.1 Children's products containing lead - Total Lead content in paint and surface coating

Ref.: CPSIA Sec 101(f) and 16 CFR 1303

Determined by: Inductively Coupled Plasma-Optical Emission Spectrometer

Coating material

- (1) Coating on zipper head: black
Coating on bell: green
Coating on bell: light blue
- (2) Coating on bell: purple
Coating on bell: orange

<u>Sample</u>	<u>Result</u>	<u>Limit</u>
(1)	<10ppm	90ppm
(2)	<10ppm	90ppm

Note: < denotes less than

2.2 Children's products containing lead - Total Lead content in substrate

Ref.: CPSIA Sec 101(a)

Determined by: Inductively Coupled Plasma-Optical Emission Spectrometer

Plastic material

- (1) Zipper tooth: black
Plastic of hand shank: orange
- (2) Film on hand shank: transparent with multicolour print

Rubber material

- (3) Rubber: white
Rubber: light blue

Metal material

- (4) Metal in rubber: silver
Zipper head(substrate): silver
Bell(substrate): silver

<u>Sample</u>	<u>Result</u>	<u>Limit</u>
(1)	<10ppm	100ppm
(2)	<10ppm	100ppm
(3)	<10ppm	100ppm
(4)	<10ppm	100ppm

Note: < denotes less than.

STC (Shanghai) Company Limited

No.130, Huashen Road, Waigaoqiao Free Trade Zone, Shanghai, China (Zip code: 200131)

Tel: (86 21) 52198248 Fax: (86 21) 52198249 Homepage: www.shstc.org Email: shstc@shstc.org

This report shall not be reproduced unless with prior written approval from STC (Shanghai) Company Limited.

For conditions of Issuance of this test report, Please refer to the overleaf or homepage

Please refer to the original test report as this e-report is for reference only!



STC TEST REPORT

Date: 2015-07-27

Page 8 of 25

No.: SP118899

TEST RESULTS:

2.3 Phthalates content

Ref.: CPSIA Sec 108

Determined by: Gas Chromatography with Mass Selective Detector

Coating material

- (1) Coating on zipper head: black
Coating on bell: green
Coating on bell: light blue
- (2) Coating on bell: purple
Coating on bell: orange

Plastic material

- (3) Zipper tooth: black
Plastic of hand shank: orange
- (4) Film on hand shank: transparent with multicolour print

Rubber material

- (5) Rubber : white
Rubber : light blue

	<u>1</u>	<u>2</u>	<u>3</u>
- Di-n-butyl phthalate (DBP)	<100ppm	<100ppm	<100ppm
- Benzyl-n-butyl phthalate (BBP)	<100ppm	<100ppm	<100ppm
- Di (2-ethylhexyl) phthalate (DEHP)	<100ppm	<100ppm	<100ppm
	<u>4</u>	<u>5</u>	
- Di-n-butyl phthalate (DBP)	<100ppm	<100ppm	
- Benzyl-n-butyl phthalate (BBP)	<100ppm	<100ppm	
- Di (2-ethylhexyl) phthalate (DEHP)	<100ppm	<100ppm	

Requirement: Each of the above phthalates shall not be greater than 1000ppm by mass of the tested material.

Note: < denotes less than

	<u>1</u>	<u>2</u>	<u>3</u>
- Di-n-octyl phthalate (DNOP)	<100ppm	<100ppm	<100ppm
- Diisononyl phthalate (DINP)	<100ppm	<100ppm	<100ppm
- Diisodecyl phthalate (DIDP)	<100ppm	<100ppm	<100ppm
	<u>4</u>	<u>5</u>	
- Di-n-octyl phthalate (DNOP)	<100ppm	<100ppm	
- Diisononyl phthalate (DINP)	<100ppm	<100ppm	
- Diisodecyl phthalate (DIDP)	<100ppm	<100ppm	

STC (Shanghai) Company Limited

No.130, Huashen Road, Waigaoqiao Free Trade Zone, Shanghai, China (Zip code: 200131)

Tel: (86 21) 52198248 Fax: (86 21) 52198249 Homepage:www.shstc.org Email:shstc@shstc.org

This report shall not be reproduced unless with prior written approval from STC (Shanghai) Company Limited.

For conditions of Issuance of this test report, Please refer to the overleaf or homepage

Please refer to the original test report as this e-report is for reference only!



STC TEST REPORT

Date: 2015-07-27

Page 9 of 25

No.: SP118899

TEST RESULTS:

Requirement: Each of the above phthalates shall not be greater than 1000ppm by mass of the tested material which can be placed in the mouth by children.

Note: < denotes less than

3. The Total Lead Content

Ref.: California Proposition 65

Determined by: Inductively Coupled Plasma-Optical Emission Spectrometer

Coating material

- (1) Coating on zipper head: black
Coating on bell: green
Coating on bell: light blue
- (2) Coating on bell: purple
Coating on bell: orange

Plastic material

- (3) Zipper tooth: black
Plastic of hand shank: orange
- (4) Film on hand shank: transparent with multicolour print

Rubber material

- (5) Rubber: white
Rubber: light blue

Metal material

- (6) Metal in rubber: silver
Zipper head(substrate):silver
Bell(substrate): silver

<u>Sample</u>	<u>Result</u>	<u>Limit</u>
(1)	<10ppm	90ppm
(2)	<10ppm	90ppm
(3)	<10ppm	100ppm
(4)	<10ppm	100ppm
(5)	<10ppm	100ppm
(6)	<10ppm	100ppm

Note: < denotes less than

STC (Shanghai) Company Limited

No.130, Huashen Road, Waigaoqiao Free Trade Zone, Shanghai, China (Zip code: 200131)

Tel: (86 21) 52198248 Fax: (86 21) 52198249 Homepage:www.shstc.org Email:shstc@shstc.org

This report shall not be reproduced unless with prior written approval from STC (Shanghai) Company Limited.

For conditions of Issuance of this test report, Please refer to the overleaf or homepage

Please refer to the original test report as this e-report is for reference only!



STC TEST REPORT

Date: 2015-07-27

Page 10 of 25

No.: SP118899

TEST RESULTS:

4. The BBP, DBP, DEHP, DnHP, DINP and DIDP content

Ref.: California Proposition 65

Determined by: Gas Chromatography with Mass Selective Detector

Coating material

- (1) Coating on zipper head: black
Coating on bell: green
Coating on bell: light blue
- (2) Coating on bell: purple
Coating on bell: orange

Plastic material

- (3) Zipper tooth: black
Plastic of hand shank: orange
- (4) Film on hand shank: transparent with multicolour print

Rubber material

- (5) Rubber : white
Rubber : light blue

	<u>1</u>	<u>2</u>	<u>3</u>
- Di-n-butyl phthalate (DBP)	<100ppm	<100ppm	<100ppm
- Benzyl-n-butyl phthalate (BBP)	<100ppm	<100ppm	<100ppm
- Di (2-ethylhexyl) phthalate (DEHP)	<100ppm	<100ppm	<100ppm
- Di-n-Hexyl phthalate (DnHP)	<100ppm	<100ppm	<100ppm
- Di-iso-nonyl phthalate(DINP)	<100ppm	<100ppm	<100ppm
- Di-iso-decyl phthalate(DIDP)	<100ppm	<100ppm	<100ppm
	<u>4</u>	<u>5</u>	
- Di-n-butyl phthalate (DBP)	<100ppm	<100ppm	
- Benzyl-n-butyl phthalate (BBP)	<100ppm	<100ppm	
- Di (2-ethylhexyl) phthalate (DEHP)	<100ppm	<100ppm	
- Di-n-Hexyl phthalate (DnHP)	<100ppm	<100ppm	
- Di-iso-nonyl phthalate(DINP)	<100ppm	<100ppm	
- Di-iso-decyl phthalate(DIDP)	<100ppm	<100ppm	

Requirement: Each of the above phthalates shall not be greater than 1000ppm by mass of the tested material.

Note: < denotes less than

STC (Shanghai) Company Limited

No.130, Huashen Road, Waigaoqiao Free Trade Zone, Shanghai, China (Zip code: 200131)

Tel: (86 21) 52198248 Fax: (86 21) 52198249 Homepage:www.shstc.org Email:shstc@shstc.org

This report shall not be reproduced unless with prior written approval from STC (Shanghai) Company Limited.

For conditions of Issuance of this test report, Please refer to the overleaf or homepage

Please refer to the original test report as this e-report is for reference only!



STC TEST REPORT

Date: 2015-07-27

Page 11 of 25

No.: SP118899

TEST RESULTS:

5. The Total Lead Content requirements according to Illinois Public Act 095-1019

Determined by: Inductively Coupled Plasma-Optical Emission Spectrometer

Coating material

- (1) Coating on zipper head: black
Coating on bell: green
Coating on bell: light blue
- (2) Coating on bell: purple
Coating on bell: orange

Plastic material

- (3) Zipper tooth: black
Plastic of hand shank: orange
- (4) Film on hand shank: transparent with multicolour print

Rubber material

- (5) Rubber: white
Rubber: light blue

Metal material

- (6) Metal in rubber: silver
Zipper head(substrate): silver
Bell(substrate): silver

<u>Sample</u>	<u>Result</u>	<u>Limit</u>
(1)	<10ppm	40ppm
(2)	<10ppm	40ppm
(3)	<10ppm	40ppm
(4)	<10ppm	40ppm
(5)	<10ppm	40ppm
(6)	<10ppm	40ppm

Note: < denotes less than

6. Phthalates content

Ref.: California Assembly Bill NO.1108

Determined by: Gas Chromatography with Mass Selective Detector

Coating material

- (1) Coating on zipper head: black
Coating on bell: green
Coating on bell: light blue
- (2) Coating on bell: purple
Coating on bell: orange

STC (Shanghai) Company Limited

No.130, Huashen Road, Waigaoqiao Free Trade Zone, Shanghai, China (Zip code: 200131)

Tel: (86 21) 52198248 Fax: (86 21) 52198249 Homepage: www.shstc.org Email: shstc@shstc.org

This report shall not be reproduced unless with prior written approval from STC (Shanghai) Company Limited.

For conditions of Issuance of this test report, Please refer to the overleaf or homepage

Please refer to the original test report as this e-report is for reference only!



STC TEST REPORT

Date: 2015-07-27

Page 12 of 25

No.: SP118899

TEST RESULTS:

Plastic material

- (3) Zipper tooth: black
Plastic of hand shank: orange
- (4) Film on hand shank: transparent with multicolour print

Rubber material

- (5) Rubber : white
Rubber : light blue

A. Any toy or children article

Test Item	CAS No.	Result(ppm)		Limit(ppm)
		1	2	
Dibutyl phthalate(DBP)	84-74-2	<100	<100	1000
Butyl benzyl phthalate (BBP)	85-68-7	<100	<100	1000
Di -2-ethylhexyl phthalate (DEHP)	117-81-7	<100	<100	1000

Test Item	CAS No.	Result(ppm)		Limit(ppm)
		3	4	
Dibutyl phthalate(DBP)	84-74-2	<100	<100	1000
Butyl benzyl phthalate (BBP)	85-68-7	<100	<100	1000
Di -2-ethylhexyl phthalate (DEHP)	117-81-7	<100	<100	1000

Test Item	CAS No.	Result(ppm)	Limit(ppm)
		5	
Dibutyl phthalate(DBP)	84-74-2	<100	1000
Butyl benzyl phthalate (BBP)	85-68-7	<100	1000
Di -2-ethylhexyl phthalate (DEHP)	117-81-7	<100	1000

B. Any toys and children articles which can be placed in mouth for children under 3 years

Test Item	CAS No.	Result(ppm)		Limit(ppm)
		1	2	
Di-n-octyl phthalate(DNOP)	117-84-0	<100	<100	1000
Di-iso-decyl phthalate(DIDP)	26761-40-0	<100	<100	1000
Di-iso-nonyl phthalate(DINP)	28553-12-0	<100	<100	1000

Test Item	CAS No.	Result(ppm)		Limit(ppm)
		3	4	
Di-n-octyl phthalate(DNOP)	117-84-0	<100	<100	1000
Di-iso-decyl phthalate(DIDP)	26761-40-0	<100	<100	1000
Di-iso-nonyl phthalate(DINP)	28553-12-0	<100	<100	1000

Test Item	CAS No.	Result(ppm)	Limit(ppm)
		5	
Di-n-octyl phthalate(DNOP)	117-84-0	<100	<100
Di-iso-decyl phthalate(DIDP)	26761-40-0	<100	<100
Di-iso-nonyl phthalate(DINP)	28553-12-0	<100	<100

STC (Shanghai) Company Limited

No.130, Huashen Road, Waigaoqiao Free Trade Zone, Shanghai, China (Zip code: 200131)

Tel: (86 21) 52198248 Fax: (86 21) 52198249 Homepage: www.shstc.org Email: shstc@shstc.org

This report shall not be reproduced unless with prior written approval from STC (Shanghai) Company Limited.

For conditions of Issuance of this test report, Please refer to the overleaf or homepage

Please refer to the original test report as this e-report is for reference only!



STC TEST REPORT

Date: 2015-07-27

Page 13 of 25

No.: SP118899

TEST RESULTS:

Note: < denotes less than.

7. Phthalates content

Ref.: San Francisco Health Code Article 34, sec 34.2

Determined by: Gas Chromatography with Mass Selective Detector

Coating material

- (1) Coating on zipper head: black
Coating on bell: green
Coating on bell: light blue
- (2) Coating on bell: purple
Coating on bell: orange

Plastic material

- (3) Zipper tooth: black
Plastic of hand shank: orange
- (4) Film on hand shank: transparent with multicolour print

Rubber material

- (5) Rubber : white
Rubber : light blue

	<u>1</u>	<u>2</u>	<u>3</u>
- Di-n-butyl phthalate (DBP)	<100ppm	<100ppm	<100ppm
- Benzyl-n-butyl phthalate (BBP)	<100ppm	<100ppm	<100ppm
- Di (2-ethylhexyl) phthalate (DEHP)	<100ppm	<100ppm	<100ppm
- Di-n-octyl phthalate (DNOP)	<100ppm	<100ppm	<100ppm
- Diisononyl phthalate (DINP)	<100ppm	<100ppm	<100ppm
- Diisodecyl phthalate (DIDP)	<100ppm	<100ppm	<100ppm
	<u>4</u>	<u>5</u>	
- Di-n-butyl phthalate (DBP)	<100ppm	<100ppm	
- Benzyl-n-butyl phthalate (BBP)	<100ppm	<100ppm	
- Di (2-ethylhexyl) phthalate (DEHP)	<100ppm	<100ppm	
- Di-n-octyl phthalate (DNOP)	<100ppm	<100ppm	
- Diisononyl phthalate (DINP)	<100ppm	<100ppm	
- Diisodecyl phthalate (DIDP)	<100ppm	<100ppm	

Requirement: Each of the above phthalates shall not be greater than 1000ppm by mass of the tested material.

Note: < denotes less than

8. Toys Regulations SOR/2011-17 under Canada Consumer Product Safety Act

AGE GRADING:

The sample was appropriately age graded with the marking of “ 6+ ”.

AGE GRADING FOR TESTING:

72 months and up

STC (Shanghai) Company Limited

No.130, Huashen Road, Waigaoqiao Free Trade Zone, Shanghai, China (Zip code: 200131)

Tel: (86 21) 52198248 Fax: (86 21) 52198249 Homepage:www.shstc.org Email:shstc@shstc.org

This report shall not be reproduced unless with prior written approval from STC (Shanghai) Company Limited.

For conditions of Issuance of this test report, Please refer to the overleaf or homepage

Please refer to the original test report as this e-report is for reference only!



STC TEST REPORT

Date: 2015-07-27

Page 14 of 25

No.: SP118899

TEST RESULTS:

8.1 Physical and Mechanical Test

Ref.: Toys Regulations SOR/2011-17, Canada Consumer Product Safety Act

<u>Applicable Clause</u>	<u>Description</u>	<u>Result</u>
3	General	*7
8	Exposed metal edges	Pass
10	Plastic edges	Pass
19	Decibel limit	Pass
21	Cellulose nitrate detection	Pass

*7 = No French information was found on the tested sample.

8.2 Flammability Tests

8.2.1 Cellulose nitrate detection

Ref.: Toys Regulations SOR/2011-17, section 21

Result: not detected.

8.3 Toxic elements analysis

Ref.: Toys Regulations SOR/2011-17, section 23 and Canada Gazette Part II Vol. 145 No.4

Method used: Inductively Coupled Plasma Emission Spectrophotometer & Inductively Coupled Plasma Mass Spectrometry

Coating material

- (1) Coating on zipper head: black
Coating on bell: green
Coating on bell: light blue
- (2) Coating on bell: purple
Coating on bell: orange

	<u>1</u>	<u>2</u>	<u>Limit</u>
Total lead.....	<10mg/kg	<10mg/kg	90mg/kg
Total mercury.....	<5mg/kg	<5mg/kg	10mg/kg
Soluble cadmium.....	<0.001%	<0.001%	0.1%
Soluble barium.....	<0.001%	<0.001%	0.1%
Soluble antimony.....	<0.001%	<0.001%	0.1%
Soluble arsenic.....	<0.001%	<0.001%	0.1%
Soluble selenium.....	<0.001%	<0.001%	0.1%

STC (Shanghai) Company Limited

No.130, Huashen Road, Waigaoqiao Free Trade Zone, Shanghai, China (Zip code: 200131)

Tel: (86 21) 52198248 Fax: (86 21) 52198249 Homepage:www.shstc.org Email:shstc@shstc.org

This report shall not be reproduced unless with prior written approval from STC (Shanghai) Company Limited.

For conditions of Issuance of this test report, Please refer to the overleaf or homepage

Please refer to the original test report as this e-report is for reference only!



STC TEST REPORT

Date: 2015-07-27

Page 15 of 25

No.: SP118899

TEST RESULTS:

8.4 Phthalates content

Ref.: Toys Regulations SOR/2011-17, section 27(3d) and Phthalates Regulation SOR/2010-298
Determined by: Gas Chromatography Mass Spectrometer

Coating material

- (1) Coating on zipper head: black
Coating on bell: green
Coating on bell: light blue
- (2) Coating on bell: purple
Coating on bell: orange

Plastic material

- (3) Zipper tooth: black
Plastic of hand shank: orange
- (4) Film on hand shank: transparent with multicolour print

Rubber material

- (5) Rubber : white
Rubber : light blue

	<u>1</u>	<u>2</u>	<u>3</u>	<u>Limit</u>
- Di-n-butyl phthalate (DBP)	ND	ND	ND	1000mg/kg
- Benzyl-n-butyl phthalate (BBP)	ND	ND	ND	1000mg/kg
- Di (2-ethylhexyl) phthalate (DEHP)	ND	ND	ND	1000mg/kg
- Di-n-octyl phthalate (DNOP)	ND	ND	ND	1000mg/kg* ⁸
- Diisononyl phthalate (DINP)	ND	ND	ND	1000mg/kg* ⁸
- Diisodecyl phthalate (DIDP)	ND	ND	ND	1000mg/kg* ⁸
	<u>4</u>	<u>5</u>	<u>Limit</u>	
- Di-n-butyl phthalate (DBP)	ND	ND	1000mg/kg	
- Benzyl-n-butyl phthalate (BBP)	ND	ND	1000mg/kg	
- Di (2-ethylhexyl) phthalate (DEHP)	ND	ND	1000mg/kg	
- Di-n-octyl phthalate (DNOP)	ND	ND	1000mg/kg* ⁸	
- Diisononyl phthalate (DINP)	ND	ND	1000mg/kg* ⁸	
- Diisodecyl phthalate (DIDP)	ND	ND	1000mg/kg* ⁸	

*⁸ = The content of each phthalate above shall not be greater than 1000mg/kg by mass of the plasticised material which can be placed in the mouth of children under 4 years of age.

Notes: ND = Not Detected
Method detection limit = 100mg/kg

STC (Shanghai) Company Limited

No.130, Huashen Road, Waigaoqiao Free Trade Zone, Shanghai, China (Zip code: 200131)
Tel: (86 21) 52198248 Fax: (86 21) 52198249 Homepage: www.shstc.org Email: shstc@shstc.org
This report shall not be reproduced unless with prior written approval from STC (Shanghai) Company Limited.
For conditions of Issuance of this test report, Please refer to the overleaf or homepage
Please refer to the original test report as this e-report is for reference only!



STC TEST REPORT

Date: 2015-07-27

Page 16 of 25

No.: SP118899

TEST RESULTS:

9. Total lead content in mouth-contact articles

Ref.: Consumer Products Containing Lead (Contact with mouth) Regulations SOR/2010-273

Determined by: Inductively Coupled Plasma-Optical Emission Spectrometer

Coating material

- (1) Coating on zipper head: black
Coating on bell: green
Coating on bell: light blue
- (2) Coating on bell: purple
Coating on bell: orange

Plastic material

- (3) Zipper tooth: black
Plastic of hand shank: orange
- (4) Film on hand shank: transparent with multicolour print

Rubber material

- (5) Rubber: white
Rubber: light blue

Metal material

- (6) Metal in rubber: silver
Zipper head(substrate): silver
Bell(substrate): silver

	<u>1</u>	<u>2</u>	<u>3</u>	<u>Limit</u>
Total lead.....	<10mg/kg	<10mg/kg	<10mg/kg	90mg/kg
	<u>4</u>	<u>5</u>	<u>6</u>	<u>Limit</u>
Total lead.....	<10mg/kg	<10mg/kg	<10mg/kg	90mg/kg

10. European Standard for Safety of Toys

10.1 EN71-1:2014 - Part 1: Mechanical and physical properties

AGE GRADING:

The sample was appropriately age graded with the marking of “ 6+ ”.

AGE GRADING FOR TESTING:

72 months and up

STC (Shanghai) Company Limited

No.130, Huashen Road, Waigaoqiao Free Trade Zone, Shanghai, China (Zip code: 200131)

Tel: (86 21) 52198248 Fax: (86 21) 52198249 Homepage: www.shstc.org Email: shstc@shstc.org

This report shall not be reproduced unless with prior written approval from STC (Shanghai) Company Limited.

For conditions of Issuance of this test report, Please refer to the overleaf or homepage

Please refer to the original test report as this e-report is for reference only!



STC TEST REPORT

Date: 2015-07-27

Page 17 of 25

No.: SP118899

TEST RESULTS:

<u>Applicable Clause</u>	<u>Description</u>	<u>Result</u>
4	<u>General requirements.</u>	----
4.1	Materials cleanliness	Pass
4.7	Edges	Pass
4.8	Points and metallic wires	Pass
4.20	Acoustics	Pass
4.23	<u>Magnets</u>	----
4.23.2	Toys other than magnetic/electrical experimental sets intended for children over 8 years	Pass
7	<u>Warning , markings and instructions for use</u>	Pass
7.1	General	Pass
7.2	Toys ont intended for children under 36 months	Pass

10.2 EN71-2:2011+A1:2014- Part 2: Flammability

<u>Applicable Clause</u>	<u>Description</u>	<u>Result</u>
4.1	General requirements	Pass

10.3 EN71-3:2013+A1:2014: Migration of certain elements

Determined by: Inductively Coupled Plasma Mass Spectrometry

10.3.1 Category III: Scraped-off toy material

Coating material

- (1) Coating on zipper head: black*⁹
- (2) Coating on bell: green*¹⁰
- (3) Coating on bell: light blue*¹⁰
- (4) Coating on bell: purple*¹⁰
- (5) Coating on bell: orange*¹⁰

Plastic material

- (6) Zipper tooth: black
- (7) Plastic of hand shank: orange
- (8) Film on hand shank: transparent with multicolour print

Rubber material

- (9) Rubber : white*¹⁰
- (10) Rubber : light blue

Metal material

- (11) Metal in rubber: silver
- (12) Zipper head (substrate): silver *¹¹
- (13) Bell(substrate): silver (Big)
- (14) Bell(substrate): silver (small)

STC (Shanghai) Company Limited

No.130, Huashen Road, Waigaoqiao Free Trade Zone, Shanghai, China (Zip code: 200131)

Tel: (86 21) 52198248 Fax: (86 21) 52198249 Homepage:www.shstc.org Email:shstc@shstc.org

This report shall not be reproduced unless with prior written approval from STC (Shanghai) Company Limited.

For conditions of Issuance of this test report, Please refer to the overleaf or homepage

Please refer to the original test report as this e-report is for reference only!



STC TEST REPORT

Date: 2015-07-27

Page 18 of 25

No.: SP118899

TEST RESULTS:

Textile material

- (15) Fabric: black
- (16) Fabric of the rope: black
- (17) Fabric: multicolour

*⁹ = The surface coating is less than 10mg, so it is not necessary to conduct the test according to the standard.

*¹⁰ = There were insufficient materials to produce the test portion of 100 mg in one sample. According to the Standard, the quantities of the elements were calculated as if 100 mg of test portion had been used. The actual weight of the specified materials used for analysis were shown below :

- (2) Coating on bell: green(69.9mg)
- (3) Coating on bell: light blue(20.6mg)
- (4) Coating on bell: purple(12.8mg)
- (5) Coating on bell: orange(55.9mg)
- (14) Rubber : white (29.6mg)

*¹¹ = Accessible glass, ceramic and metallic toy components which do not fit within the small parts cylinder are not tested according to requirement of EN71-3:2013+A1:2014.

Element	Result (mg/kg)					Requirement
	Sample ID					(mg/kg)
	(2)	(3)	(4)	(5)	(6)	Category III
Aluminium	295	180	152	339	<5	70000
Arsenic	<2	<2	<2	<2	<2	47
Boron	<5	<5	<5	<5	<5	15000
Barium	<5	<5	<5	<5	<5	18750
Cadmium	<5	<5	<5	<5	<5	17
Cobalt	<5	<5	<5	<5	<5	130
Chromium(III)	<5	<5	<5	<5	<5	460
Chromium(VI)	* ¹²	* ¹²	<0.2	* ¹²	<0.2	0.2
Copper	<5	<5	<5	<5	<5	7700
Mercury	<5	<5	<5	<5	<5	94
Manganese	38	27	6	43	<5	15000
Nickel	<5	<5	<5	<5	<5	930
Lead	<5	<5	<5	<5	<5	160
Antimony	<5	<5	<5	<5	<5	560
Selenium	<5	<5	<5	<5	<5	460
Tin	<5	<5	5	<5	<5	180000
Organic tin	<5	<5	<5	<5	<5	12
Strontium	<5	<5	<5	<5	<5	56000
Zinc	28	111	<5	30	<5	46000

STC (Shanghai) Company Limited

No.130, Huashen Road, Waigaoqiao Free Trade Zone, Shanghai, China (Zip code: 200131)

Tel: (86 21) 52198248 Fax: (86 21) 52198249 Homepage:www.shstc.org Email:shstc@shstc.org

This report shall not be reproduced unless with prior written approval from STC (Shanghai) Company Limited.

For conditions of Issuance of this test report, Please refer to the overleaf or homepage

Please refer to the original test report as this e-report is for reference only!



STC TEST REPORT

Date: 2015-07-27

Page 19 of 25

No.: SP118899

TEST RESULTS:

Element	Result (mg/kg)					Requirement
	Sample ID					(mg/kg)
	(7)	(8)	(9)	(10)	(11)	Category III
Aluminium	<5	9	<5	<5	92	70000
Arsenic	<2	<2	<2	<2	<2	47
Boron	<5	<5	<5	<5	<5	15000
Barium	<5	5	<5	<5	<5	18750
Cadmium	<5	<5	<5	<5	<5	17
Cobalt	<5	<5	<5	<5	<5	130
Chromium(III)	<5	<5	<5	<5	<5	460
Chromium(VI)	<0.2	<0.2	<0.2	<0.2	<0.2	0.2
Copper	<5	<5	<5	<5	<5	7700
Mercury	<5	<5	<5	<5	<5	94
Manganese	38	27	6	43	<5	15000
Nickel	<5	<5	<5	<5	<5	930
Lead	<5	<5	<5	<5	<5	160
Antimony	<5	<5	<5	<5	<5	560
Selenium	<5	<5	<5	<5	<5	460
Tin	<5	<5	5	<5	<5	180000
Organic tin	<5	<5	<5	<5	<5	12
Strontium	<5	<5	<5	<5	<5	56000
Zinc	<5	<5	<5	<5	2725	46000

STC (Shanghai) Company Limited

No.130, Huashen Road, Waigaoqiao Free Trade Zone, Shanghai, China (Zip code: 200131)

Tel: (86 21) 52198248 Fax: (86 21) 52198249 Homepage: www.shstc.org Email: shstc@shstc.org

This report shall not be reproduced unless with prior written approval from STC (Shanghai) Company Limited.

For conditions of Issuance of this test report, Please refer to the overleaf or homepage

Please refer to the original test report as this e-report is for reference only!



STC TEST REPORT

Date: 2015-07-27

Page 20 of 25

No.: SP118899

TEST RESULTS:

Element	Result (mg/kg)					Requirement
	Sample ID					(mg/kg)
	(13)	(14)	(15)	(16)	(17)	Category III
Aluminium	8	13	6	<5	<5	70000
Arsenic	<2	<2	<2	<2	<2	47
Boron	<5	<5	<5	<5	<5	15000
Barium	<5	<5	<5	<5	<5	18750
Cadmium	<5	<5	<5	<5	<5	17
Cobalt	<5	<5	<5	<5	<5	130
Chromium(III)	<5	<5	<5	<5	<5	460
Chromium(VI)	*12	*12	<0.2	<0.2	<0.2	0.2
Copper	<5	<5	<5	<5	<5	7700
Mercury	<5	<5	<5	<5	<5	94
Manganese	75	67	<5	<5	<5	15000
Nickel	<5	<5	<5	<5	<5	930
Lead	<5	<5	<5	<5	<5	160
Antimony	<5	<5	<5	<5	<5	560
Selenium	<5	<5	<5	<5	<5	460
Tin	<5	<5	5	<5	<5	180000
Organic tin	<5	<5	<5	<5	<5	12
Strontium	<5	<5	<5	<5	<5	56000
Zinc	298	18	6	19	72	46000

Remark : mg/kg = milligrams per kilogram
 <=Less than

The Chromium (III) and Chromium (VI) was reported as Chromium content. Whenever the result of Chromium exceeded the limit of Chromium (III) and Chromium (VI), confirmation test was performed.

The Organic tin was reported as Tin content unless specified.

*12= The results of Chromium exceeded the limit of Chromium (VI) ; hence confirmation test was performed. (See soluble Chromium (VI) section)

10.3.2 Chromium (VI) contents

Method used: EN71-3: 2013+A1:2014
 Determined by: LC-ICP-MS

STC (Shanghai) Company Limited

No.130, Huashen Road, Waigaoqiao Free Trade Zone, Shanghai, China (Zip code: 200131)
 Tel: (86 21) 52198248 Fax: (86 21) 52198249 Homepage:www.shstc.org Email:shstc@shstc.org
 This report shall not be reproduced unless with prior written approval from STC (Shanghai) Company Limited.
 For conditions of Issuance of this test report, Please refer to the overleaf or homepage
 Please refer to the original test report as this e-report is for reference only!



STC TEST REPORT

Date: 2015-07-27

Page 21 of 25

No.: SP118899

TEST RESULTS:

Category III: Scraped off toy materials

Coating material

- (2) Coating on bell: green
- (3) Coating on bell: light blue
- (5) Coating on bell: orange

Metal material

- (13) Bell(substrate): silver (Big)
- (14) Bell(substrate): silver (small)

Element	Result(s) (mg/kg)					Limit (mg/kg)
	(2)	(3)	(5)	(13)	(14)	
Chromium (VI)	<0.2	<0.2	<0.2	<0.2	<0.2	0.2

11. Phthalate content

Ref.: Annex XVII item 51&52 of the REACH Regulation

Determined by: Gas Chromatography-Mass Spectrometry

Coating material

- (1) Coating on zipper head: black
Coating on bell: green
Coating on bell: light blue
- (2) Coating on bell: purple
Coating on bell: orange

Plastic material

- (3) Zipper tooth: black
Plastic of hand shank: orange
- (4) Film on hand shank: transparent with multicolour print

Rubber material

- (5) Rubber : white
Rubber : light blue

A. For toys and childcare articles

Test Item	CAS No.	Result		Limit
		1	2	
Dibutyl phthalate(DBP)	84-74-2	<0.005%	<0.005%	<0.1%
Butyl benzyl phthalate (BBP)	85-68-7	<0.005%	<0.005%	
Di -2-ethylhexyl phthalate (DEHP)	117-81-7	<0.005%	<0.005%	

STC (Shanghai) Company Limited

No.130, Huashen Road, Waigaoqiao Free Trade Zone, Shanghai, China (Zip code: 200131)

Tel: (86 21) 52198248 Fax: (86 21) 52198249 Homepage:www.shstc.org Email:shstc@shstc.org

This report shall not be reproduced unless with prior written approval from STC (Shanghai) Company Limited.

For conditions of Issuance of this test report, Please refer to the overleaf or homepage

Please refer to the original test report as this e-report is for reference only!



STC TEST REPORT

Date: 2015-07-27

Page 22 of 25

No.: SP118899

TEST RESULTS:

Test Item	CAS No.	Result		Limit
		<u>3</u>	<u>4</u>	
Dibutyl phthalate(DBP)	84-74-2	<0.005%	<0.005%	<0.1%
Butyl benzyl phthalate (BBP)	85-68-7	<0.005%	<0.005%	
Di -2-ethylhexyl phthalate (DEHP)	117-81-7	<0.005%	<0.005%	

Test Item	CAS No.	Result	Limit
		<u>5</u>	
Dibutyl phthalate(DBP)	84-74-2	<0.005%	<0.1%
Butyl benzyl phthalate (BBP)	85-68-7	<0.005%	
Di -2-ethylhexyl phthalate (DEHP)	117-81-7	<0.005%	

B. Additional requirements for toys and children articles, which can be placed in mouth by the children

Test Item	CAS No.	Result		Limit
		<u>1</u>	<u>2</u>	
Di-n-octyl phthalate(DNOP)	117-84-0	<0.005%	<0.005%	<0.1%
Di-iso-decyl phthalate(DIDP)	26761-40-0	<0.005%	<0.005%	
Di-iso-nonyl phthalate(DINP)	28553-12-0	<0.005%	<0.005%	

Test Item	CAS No.	Result		Limit
		<u>3</u>	<u>4</u>	
Di-n-octyl phthalate(DNOP)	117-84-0	<0.005%	<0.005%	<0.1%
Di-iso-decyl phthalate(DIDP)	26761-40-0	<0.005%	<0.005%	
Di-iso-nonyl phthalate(DINP)	28553-12-0	<0.005%	<0.005%	

Test Item	CAS No.	Result	Limit
		<u>5</u>	
Di-n-octyl phthalate(DNOP)	117-84-0	<0.005%	<0.1%
Di-iso-decyl phthalate(DIDP)	26761-40-0	<0.005%	
Di-iso-nonyl phthalate(DINP)	28553-12-0	<0.005%	

Note: < denotes less than.

12. Total cadmium analysis

Ref.: Annex XVII Item 23 of the REACH Regulation

Determined by: Inductively Coupled Plasma-Optical Emission Spectrometer

Coating material

- (1) Coating on zipper head: black
Coating on bell: green
Coating on bell: light blue
- (2) Coating on bell: purple
Coating on bell: orange

STC (Shanghai) Company Limited

No.130, Huashen Road, Waigaoqiao Free Trade Zone, Shanghai, China (Zip code: 200131)

Tel: (86 21) 52198248 Fax: (86 21) 52198249 Homepage: www.shstc.org Email: shstc@shstc.org

This report shall not be reproduced unless with prior written approval from STC (Shanghai) Company Limited.

For conditions of Issuance of this test report, Please refer to the overleaf or homepage

Please refer to the original test report as this e-report is for reference only!



STC TEST REPORT

Date: 2015-07-27

Page 23 of 25

No.: SP118899

TEST RESULTS:

Plastic material

- (3) Zipper tooth: black
Plastic of hand shank: orange
- (4) Film on hand shank: transparent with multicolour print

Rubber material

- (5) Rubber: white
Rubber: light blue

Metal material

- (6) Metal in rubber: silver
Zipper head(substrate): silver
Bell(substrate): silver

<u>Test sample</u>	<u>Result (mg/kg)</u>	<u>Limit(mg/kg)</u>
(1)	<5	100
(2)	<5	100
(3)	<5	100
(4)	<5	100
(5)	<5	100
(6)	<5	100

- Notes:
- 1. mg/kg denotes milligram per kilogram.
 - 2. Method detection limit=5mg/kg.
 - 3. < denotes less than.

13. Detection of Banned Azo Colourants

Ref.: Annex XVII item 43 of the REACH Regulation

Tested method: EN 14362-1: 2012

Textile materials:

- (1) Fabric: black
Fabric of the rope: black
Fabric: multicolour

STC (Shanghai) Company Limited

No.130, Huashen Road, Waigaoqiao Free Trade Zone, Shanghai, China (Zip code: 200131)

Tel: (86 21) 52198248 Fax: (86 21) 52198249 Homepage: www.shstc.org Email: shstc@shstc.org

This report shall not be reproduced unless with prior written approval from STC (Shanghai) Company Limited.

For conditions of Issuance of this test report, Please refer to the overleaf or homepage

Please refer to the original test report as this e-report is for reference only!



STC TEST REPORT

Date: 2015-07-27

Page 24 of 25

No.: SP118899

TEST RESULTS:

Aromatic Amines		Result(mg/kg)
CAS No.	Name	(1)
92-67-1	4-aminobiphenyl	ND
92-87-5	Benzidine	ND
95-69-2	4-Chloro- <i>o</i> -toluidine	ND
91-59-8	2-Naphthylamine	ND
97-56-3	<i>o</i> -Aminoazotulene	ND
99-55-8	5-Nitro- <i>o</i> -toluidine	ND
106-47-8	4-Chloroaniline	ND
615-05-4	4-Methoxy- <i>m</i> -phenylenediamine	ND
101-77-9	4,4'-Methylenedianiline	6.2
91-94-1	3,3'-Dichlorobenzidine	ND
119-90-4	3,3'-Dimethoxybenzidine	ND
119-93-7	3,3'-Dimethylbenzidine	ND
838-88-0	4,4'-Methylenedi- <i>o</i> -toluidine	ND
120-71-8	6-Methoxy- <i>m</i> -toluidine	ND
101-14-4	2,2'-Dichloro-4,4'-methylenedianiline	ND
101-80-4	4,4'-Oxydianiline	ND
139-65-1	4,4'-Thiodianiline	ND
95-53-4	<i>o</i> -Toluidine	ND
95-80-7	4-Methy- <i>m</i> -phenylenediamine	ND
137-17-7	2,4,5-Trimethylaniline	ND
90-04-0	2-Methoxyaniline	ND
60-09-3	4-Amino-azo-benzene	ND

- Notes:
1. Maximum permissible limit: 30mg/kg.
 2. Method detection limit: 5mg/kg.
 3. mg/kg denotes milligram per kilogram.
 4. ND denotes not detected.
 5. Composite test is client's requirement.

14. Nickel Release content

Ref.: Annex XVII Item 27(b) of the REACH Regulation

Method Used: EN12472:2005 & EN1811:2011

Metal material:

- (1) Metal in rubber: silver
- (2) Zipper head(substrate): silver
- (3) Bell(substrate): silver

STC (Shanghai) Company Limited

No.130, Huashen Road, Waigaoqiao Free Trade Zone, Shanghai, China (Zip code: 200131)

Tel: (86 21) 52198248 Fax: (86 21) 52198249 Homepage: www.shstc.org Email: shstc@shstc.org

This report shall not be reproduced unless with prior written approval from STC (Shanghai) Company Limited.

For conditions of Issuance of this test report, Please refer to the overleaf or homepage

Please refer to the original test report as this e-report is for reference only!



STC TEST REPORT

Date: 2015-07-27

Page 25 of 25

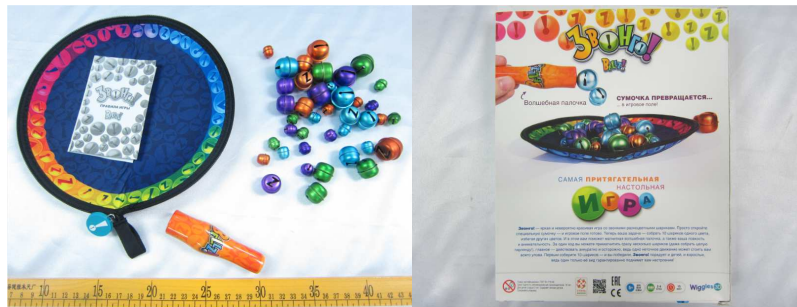
No.: SP118899

TEST RESULTS:

<u>Sample</u>	<u>Result($\mu\text{g}/\text{cm}^2/\text{week}$)</u>	<u>Limit($\mu\text{g}/\text{cm}^2/\text{week}$)</u>
(1)	<0.1	0.5
(2)	<0.1	0.5
(3)	<0.1	0.5

Note(s): < denotes less than.

The photo of submitted samples



***** End of Test Report *****

STC (Shanghai) Company Limited

No.130, Huashen Road, Waigaoqiao Free Trade Zone, Shanghai, China (Zip code: 200131)

Tel: (86 21) 52198248 Fax: (86 21) 52198249 Homepage: www.shstc.org Email: shstc@shstc.org

This report shall not be reproduced unless with prior written approval from STC (Shanghai) Company Limited.

For conditions of Issuance of this test report, Please refer to the overleaf or homepage

Please refer to the original test report as this e-report is for reference only!