

## Test Report

Number: SZHH01504529

Applicant: [REDACTED]

Date: Oct 21, 2020

Attn: [REDACTED]

### Sample Description:

Six (6) sets of submitted sample said to be :  
Item Name : **Gyro Wheel/Whirly Wheel.**  
Item No. : **8810R / 8813R1.**  
Labelled Age Group : For Ages 3 and up.  
Applicant Specified Age : Over 3 years.  
Grading for Testing :  
Packaging Provided by Applicant : Yes.  
Additional Material and Wet : No.  
Paint Provided :  
Manufacturer : [REDACTED]  
Buyer : Leading Edge.  
Country of Origin : China.  
Country of Destination : USA.  
Date Sample Received : Oct 10, 2020.  
Testing Period : Oct 10, 2020 ~ Oct 21, 2020.



### Tests conducted:

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

### Conclusion:

<u>Tested Samples</u>	<u>Standard – U.S. ASTM F963-17</u>	<u>Result</u>
Submitted samples	Physical and mechanical tests	Pass
	Flammability test of materials other than textile materials	Pass
<u>Tested Samples</u>	<u>Standard</u>	<u>Result</u>
Submitted samples	U.S. CFR Title 16 (CPSC Regulations) Mechanical and physical test	Pass
	U.S. CFR Title 16 (CPSC Regulations)Part 1500.3(c)(6)(vi) flammability test on rigid and pliable solids	Pass



## Test Report

Number: SZHH01504529

Tests Conducted

### 10 Total Lead Content

With reference to CPSC-CH-E1002-08.3 and/or CPSC-CH-E1001.08.3 and/or CPSC-CH-E1003-09.1 and followed by Inductively Coupled Argon Plasma Spectrometry.

Surface coating

Element/Test Item	1	-	-	-	-	Units	D.L.	Limit
Lead (Pb)	ND	-	-	-	-	mg/kg	10	90

Non-surface coating(Substrate)

Element/Test Item	2+3+4	5+6+7	8+9+10	11+12+13	14	Units	D.L.	Limit
Lead (Pb)	ND	ND	ND	ND	ND	mg/kg	10	100
Element/Test Item	15	16	-	-	-	Units	D.L.	Limit
Lead (Pb)	ND	ND	-	-	-	mg/kg	10	100

Remarks:

D.L. = Detection Limit

ND = Not detected

Tested Component(s): See component list in the last section of this report

### 11 Total Lead (Pb) Content

With reference to Standard Operating Procedure for Determining Lead (Pb) in paint and other similar surface coatings, test method CPSC-CH-E1003-09.1 was used and total Lead content was determined by Inductively Coupled Argon Plasma Spectrometry.

Element/Test Item	1	-	-	-	-	Units	D.L.	Limit
Lead (Pb)	ND	-	-	-	-	%	0.001	0.009

Remarks:

D.L. = Detection Limit

ND = Not detected

The above limit was quoted according to U.S. CFR Title 16 Part 1303 for Ban of Lead-containing Paint and Certain Consumer Products Bearing Lead-containing Paint.

Tested Components: See component list in the last section of this report



Page 10 of 14



## Test Report

Number: SZHH01504529

Tests Conducted

### 12 Phthalate Content

With reference to CPSC-CH-C1001-09.4, by Gas Chromatographic-Mass Spectrometric (GC-MS) analysis.

Test Item	CAS No.	Result					Units	D.L.	Limit
		1	2+3+4	5+6+7	8+9+10	11+12+13			
Dibutyl phthalate (DBP)	84-74-2	ND	ND	ND	ND	ND	%	0.01	0.1
Di-(2-ethylhexyl) phthalate (DEHP)	117-81-7	ND	ND	ND	ND	ND	%	0.01	0.1
Benzyl butyl phthalate (BBP)	85-68-7	ND	ND	ND	ND	ND	%	0.01	0.1
Di-isononyl phthalate (DINP)	28553-12-0 68515-48-0	ND	ND	ND	ND	ND	%	0.01	0.1
Di-isobutyl phthalate (DIBP)	84-69-5	ND	ND	ND	ND	ND	%	0.01	0.1
Di-n-pentyl phthalate (DPENP)	131-18-0	ND	ND	ND	ND	ND	%	0.01	0.1
Di-n-hexyl phthalate (DnHP/DHEXP)	84-75-3	ND	ND	ND	ND	ND	%	0.01	0.1
Di-cyclohexyl phthalate (DCHP)	84-61-7	ND	ND	ND	ND	ND	%	0.01	0.1
Test Item	CAS No.	Result					Units	D.L.	Limit
		14	-	-	-	-			
Dibutyl phthalate (DBP)	84-74-2	ND	-	-	-	-	%	0.01	0.1
Di-(2-ethylhexyl) phthalate (DEHP)	117-81-7	ND	-	-	-	-	%	0.01	0.1
Benzyl butyl phthalate (BBP)	85-68-7	ND	-	-	-	-	%	0.01	0.1
Di-isononyl phthalate (DINP)	28553-12-0 68515-48-0	ND	-	-	-	-	%	0.01	0.1
Di-isobutyl phthalate (DIBP)	84-69-5	ND	-	-	-	-	%	0.01	0.1
Di-n-pentyl phthalate (DPENP)	131-18-0	ND	-	-	-	-	%	0.01	0.1
Di-n-hexyl	84-75-3	ND	-	-	-	-	%	0.01	0.1



**Test Report**

Number: SZHH01504529

Tests Conducted

phthalate (DnHP/DHEXP)									
Di-cyclohexyl phthalate (DCHP)	84-61-7	ND	-	-	-	-	%	0.01	0.1

Remarks:

D.L. = Detection Limit

The above limit was quoted according to US 16 CFR Part 1307 for Prohibition of Children’s Toys and Child Care Articles Containing Specified Phthalates.

ND = Not detected

Tested Component(s): See component list in the last section of this report

13 Total Lead (Pb) Content in Surface Coating

With reference to Standard Operating Procedure for Determining Lead (Pb) in paint and other similar surface coatings, test method CPSC-CH-E1003-09.1 was used and total Lead content was determined by Inductively Coupled Argon Plasma Spectrometry.

Test Item	Result					Units	D.L.	Limit
	1	-	-	-	-			
Lead (Pb)	ND	-	-	-	-	mg/kg	10	90

Remarks:

D.L. = Detection Limit

The above limit was quoted according to U.S. CFR Title 16 Part 1303 and U.S. Consumer Product Safety Improvement Act 2008 Title I, Section 101 for total Lead content in surface coating.

ND = Not detected

Tested Component(s): See component list in the last section of this report



**Test Report**

Number: SZHH01504529

Tests Conducted

14 Total Lead (Pb) Content in Non-Surface Coating Materials (Substrate)

With reference to Standard Operating Procedures for Determining total Lead (Pb) in children's products, test methods CPSC-CH-E1002-08.3 and/or CPSC-CH-E1001-08.3 were used and total Lead content was determined by Inductively Coupled Argon Plasma Spectrometry.

Test Item	Result					Units	D.L.	Limit
	2+3+4	5+6+7	8+9+10	11+12+13	14			
Lead (Pb)	ND	ND	ND	ND	ND	mg/kg	10	100

  

Test Item	Result					Units	D.L.	Limit
	15	16	-	-	-			
Lead (Pb)	ND	ND	-	-	-	mg/kg	10	100

Remarks:

D.L. = Detection Limit

The above limit was quoted according to U.S. Consumer Product Safety Improvement Act 2008 Title I, Section 101 for total Lead content in Non-surface coating materials.

ND = Not detected

Tested Component(s): See component list in the last section of this report

**Component List**

No.	Test Component Description(s)
(1)	@White coating on plastic (date code of whirly wheel ).
(2)	Bright blue plastic (cap, handle of 8813R1)
(3)	Bright red plastic (cap, handle of 8813R1)
(4)	Bright green plastic (cap, handle of 8813R1).
(5)	Bright purple plastic (cap, handle of 8813R1).
(6)	Green plastic (handle of 8810R)
(7)	Red plastic (handle of 8810R)
(8)	Purple plastic (handle of 8810R)
(9)	Blue plastic (handle of 8810R)
(10)	Transparent blue plastic (whirly wheel of both styles).
(11)	Transparent green plastic (whirly wheel of both styles).
(12)	Transparent red plastic (whirly wheel of both styles).
(13)	Transparent purple plastic (whirly wheel of both styles).
(14)	Transparent plastic (whirly wheel of both styles).
(15)	Silver color metal with solder (rail of both styles).
(16)	Silver color metal (axle of whirly wheel of both styles).

\*\*\*\*\*

End of report



## Test Report

Number: SZHH01504529

### Tests Conducted

*The statements of conformity reported have considered the decision rule agreed, namely that Intertek have taken account of measurement uncertainty as calculated by Intertek, and applied according to ILAC-G8/09:2019 (Non-binary acceptance based on guard band  $w = U$ ) except designation from the customer, regulation or test specification.*

*This report is made solely on the basis of your instructions and/or information and materials supplied by you. It is not intended to be a recommendation for any particular course of action. Intertek does not accept a duty of care or any other responsibility to any person other than the Client in respect of this report and only accepts liability to the Client insofar as is expressly contained in the terms and conditions governing Intertek's provision of services to you. Intertek makes no warranties or representations either express or implied with respect to this report save as provided for in those terms and conditions. We have aimed to conduct the review on a diligent and careful basis and we do not accept any liability to you for any loss arising out of or in connection with this report, in contract, tort, by statute or otherwise, except in the event of our gross negligence or wilful misconduct. This report shall not be reproduced unless with prior written approval from Intertek Testing Services Shenzhen Ltd.*



Page 14 of 14



## Test Report

Number: SZHH01504529

### Sample Description:

<u>Tested Sample</u>	<u>Standard/Testing Item</u>	<u>Result</u>
Tested component(s) of submitted samples	U.S. ASTM F963-17 on DEHP test	Pass#
	U.S. ASTM F963-17 on soluble heavy elements test	Pass
	U.S. ASTM F963-17 on total Lead content in surface coating	Pass
	U.S. ASTM F963-17 on total Lead content in non-surface coating	Pass
	Consent Judgment No. BG-350969 for Toys (designed for or reasonable used by children under six years of age) on phthalate content based on the California Proposition 65	Pass
	Consent Judgment No. RG-356892 for Toys on total Lead content based on the California Proposition 65	Pass
	U.S. CFR Title 16 Part 1303 total Lead content	Pass
	US Consumer Product Safety Improvement Act 2008 Title I, Sec 108(a) & (b)(3) and US 16 CFR Part 1307 for Prohibition of Children's Toys and Child Care Articles Containing Specified Phthalates	Pass
	U.S. Consumer Product Safety Improvement Act 2008 Title I, Section 101 for total Lead content in surface coating	Pass
	U.S. Consumer Product Safety Improvement Act 2008 Title I, Section 101 for Total Lead content in Non-surface coating materials (substrate)	Pass

### Remarks:

# = The submitted samples were not subjected to the scope of the standard. The tests performed as per the application's request.

Authorized by:  
For Intertek Testing Services  
Shenzhen Ltd.



Rachel L. Guo  
General Manager



## Test Report

Number: SZHH01504529

### Tests Conducted

#### 1 Physical and Mechanical Tests

As per ASTM Standard Consumer Safety Specification for Toy Safety F963-17.

Test	FHSA	Parameter
Impact test	Section 1500.53(b)	4 x 3.0 ft
Torque test	Section 1500.53(e)	4 in-lbf
Tension test	Section 1500.53(f)	15 lbf
Compression test	Section 1500.53(g)	30 lbf

Section	Testing Items	Assessment
4.1	Material quality (visual check on cleanliness)	P
4.3.7	Stuffing materials (10X magnification check on contaminations)	NA
4.5	Sound-producing toys	NA
4.6.1	Toys intended for children under 36 months (small objects)	NA
4.6.2	Mouth-actuated toys	NA
4.6.3	Toys and games for children at least 36 months but less than 72 months (small part warning)	NA
4.7	Accessible edges	P
4.8	Projections	NA
4.9	Accessible points	P
4.10	Wires or rods	NA
4.11	Nails and fasteners	P
4.12	Plastic film	NA
4.13	Folding mechanisms and hinges	NA
4.14	Cords, straps, and elastics	NA
4.15	Stability and over-load requirements	NA
4.16	Confined spaces	NA
4.17	Wheels, tires and axles	NA
4.18	Holes, clearance, and accessibility of mechanisms	NA
4.19	Simulated protective devices (such as helmets, hats and goggles)	NA
4.20	Pacifiers	NA
4.21	Projectile toys	NA
4.22	Teethers and teething toys	NA
4.23	Rattles	NA
4.24	Squeeze toys	NA
4.25	Battery-operated toys	P
4.26	Toys intended to be attached to a crib or playpen	NA
4.27	Stuffed and beanbag-type toys	NA





## Test Report

Number: SZHH01504529

### Tests Conducted

Section	Testing Items	Assessment
4.28	Stroller and carriage toys	NA
4.29	Art materials	NA
4.30	Toy gun marking	NA
4.31	Balloons	NA
4.32	Certain toys with nearly spherical ends	NA
4.33	Marbles	NA
4.34	Balls	NA
4.35	Pompoms	NA
4.36	Hemispheric-shaped objects	NA
4.37	Yoyo elastic tether toys	NA
4.38	Magnets	P
4.39	Jaw entrapment in handles and steering wheels	NA
4.40	Expanding materials	NA
4.41	Toy chests	NA
5	Labelling requirement	P
6	Instructional literature	P
7	Producer's markings	
7.1	- Name of producer/distributor (Toy& Package)	Yes
	- Address (Toy& Package)	Yes
7.2	Battery-Powered Ride-on Toy	NA
7.3	Toy chests	
7.3.1	Name and address of manufacturer/distributor/seller	NA
7.3.2	Code mark	NA

Remark: The submitted samples were undergone the tests in accordance with section 8.5 through section 8.16 and 8.20 through 8.30 on normal use, abuse and specific tests for different types of toys whichever is applicable.

P = Pass                      NA = Not Applicable

## 2 Flammability Test

As per section 4.2 of the ASTM Standard Consumer Safety Specification on Toy Safety F963-17, the sample was tested according to Annex A5 Flammability Testing Procedure for Solids and Soft Toys.

Result: Ignited but self-extinguished before burn rate could be determined.



**Test Report**

Number: SZHH01504529

Tests Conducted

3 Physical and Mechanical Test

As per U.S. Code of Federal Regulations Title 16 Part 1500.50, the hazards of sharp points, sharp edge and small parts are assessed both before and after applicable use and abuse tests.

	No. of Sample Tested	Sharp Point (1500.48)	Sharp Edge (1500.49)	Small Part (1501)
As received	2	P	P	NA
Impact (1500.53 (b))	1	P	P	NA
Flexure (1500.53 (d))	0	NA	NA	NA
Torque (1500.53 (e))	1	P	P	NA
Tension (1500.53 (f))	1	P	P	NA
Compression (1500.53 (g))	1	P	P	NA

Remark : P = Pass  
NA= Not Applicable

4 Flammability Test

As per U.S. Code of Federal Regulations Title 16 Part 1500.44 for rigid and pliable solids.

Result: Ignited but self-extinguished before burn rate could be determined.

5 Di-(2-ethylhexyl) phthalate (DEHP) Content Test

As per Section 4.3.8 of the ASTM Standard Consumer Safety Specification on Toy Safety F963-17, test method ASTM D3421-75 was used, Chloroform/Methanol mixed solvent extraction and followed by Capillary Column Gas Chromatography.

Element/Test Item	CAS No.	1	2+3+4	5+6+7	8+9+10	11+12+13	Units	D.L.	Limit
Di(2-ethyl hexyl) phthalate (DEHP)	117-81-7	ND	ND	ND	ND	ND	%	0.01	3
Element/Test Item	CAS No.	14	-	-	-	-	Units	D.L.	Limit
Di(2-ethyl hexyl) phthalate (DEHP)	117-81-7	ND	-	-	-	-	%	0.01	3

Remarks:  
D.L. = Detection Limit  
ND = Not detected

Tested Component(s): See component list in the last section of this report



## Test Report

Number: SZHH01504529

Tests Conducted

### 6 Heavy Elements Analysis

With reference to Section 4.3.5 and Section 8.3.2 to 8.3.5 of the ASTM Standard Consumer Safety Specification on Toy Safety F963-17, heavy elements migration content were determined by Inductively Coupled Argon Plasma Spectrometry.

#### Non-modelling clay

Test Item	Result					Units	D.L.	Limit
	2	3	4	5	6			
Barium (Ba)	ND	ND	49	ND	ND	mg/kg	5	1000
Lead (Pb)	ND	ND	ND	ND	ND	mg/kg	5	90
Cadmium (Cd)	ND	ND	ND	ND	ND	mg/kg	5	75
Antimony (Sb)	ND	ND	ND	ND	ND	mg/kg	5	60
Selenium (Se)	ND	ND	ND	ND	ND	mg/kg	5	500
Chromium (Cr)	ND	ND	ND	ND	ND	mg/kg	5	60
Mercury (Hg)	ND	ND	ND	ND	ND	mg/kg	5	60
Arsenic (As)	ND	ND	ND	ND	ND	mg/kg	2.5	25
Test Item	Result					Units	D.L.	Limit
	7	8	9	10	11			
Barium (Ba)	ND	ND	ND	ND	ND	mg/kg	5	1000
Lead (Pb)	ND	ND	ND	ND	ND	mg/kg	5	90
Cadmium (Cd)	ND	ND	ND	ND	ND	mg/kg	5	75
Antimony (Sb)	ND	ND	ND	ND	ND	mg/kg	5	60
Selenium (Se)	ND	ND	ND	ND	ND	mg/kg	5	500
Chromium (Cr)	ND	ND	ND	ND	ND	mg/kg	5	60
Mercury (Hg)	ND	ND	ND	ND	ND	mg/kg	5	60



## Test Report

Number: SZHH01504529

### Tests Conducted

Test Item	Result					Units	D.L.	Limit
	12	13	14	-	-			
Arsenic (As)	ND	ND	ND	ND	ND	mg/kg	2.5	25
Barium (Ba)	ND	20	ND	-	-	mg/kg	5	1000
Lead (Pb)	ND	ND	ND	-	-	mg/kg	5	90
Cadmium (Cd)	ND	ND	ND	-	-	mg/kg	5	75
Antimony (Sb)	ND	ND	ND	-	-	mg/kg	5	60
Selenium (Se)	ND	ND	ND	-	-	mg/kg	5	500
Chromium (Cr)	ND	ND	ND	-	-	mg/kg	5	60
Mercury (Hg)	ND	ND	ND	-	-	mg/kg	5	60
Arsenic (As)	ND	ND	ND	-	-	mg/kg	2.5	25

#### Remarks:

D.L. = Detection Limit

ND = Not detected

Tested Component(s): See component list in the last section of this report

@: Since the sample weight of the component was less than 10 mg, soluble heavy metal analysis was not applicable.



## Test Report

Number: SZHH01504529

### Tests Conducted

#### 7 Total Lead (Pb) Content

With reference to Section 4.3.5 of the ASTM Standard Consumer Safety Specification on Toy Safety F963-17, test method CPSC-CH-E1003-09.1 was used and total Lead content was determined by Inductively Coupled Argon Plasma Spectrometry.

Test Item	Result					Units	D.L.	Limit
	1	-	-	-	-			
Lead (Pb)	ND	-	-	-	-	mg/kg	10	90

#### Remarks:

D.L. = Detection Limit

ND = Not detected

Tested Component(s): See component list in the last section of this report

#### 8 Total Lead (Pb) Content

With reference to Section 4.3.5 of the ASTM Standard Consumer Safety Specification on Toy Safety F963-17, test method CPSC-CH-E1001-08.3 or/and CPSC-CH-E1002-08.3 were used and total Lead content was determined by Inductively Coupled Argon Plasma Spectrometry.

Test Item	Result					Units	D.L.	Limit
	2+3+4	5+6+7	8+9+10	11+12+13	14			
Lead (Pb)	ND	ND	ND	ND	ND	mg/kg	10	100

  

Test Item	Result					Units	D.L.	Limit
	15	16	-	-	-			
Lead (Pb)	ND	ND	-	-	-	mg/kg	10	100

#### Remarks:

D.L. = Detection Limit

ND = Not detected

Tested Component(s): See component list in the last section of this report



## Test Report

Number: SZHH01504529

### Tests Conducted

#### 9 Phthalate Content

With reference to CPSC-CH-C1001-09.4 and followed by Gas Chromatographic-Mass Spectrometric (GC-MS) analysis.

Element/Test Item	CAS No.	1	2+3+4	5+6+7	8+9+10	11+12+13	Units	D.L.	Limit
Di-(2-ethylhexyl) phthalate (DEHP)	117-81-7	ND	ND	ND	ND	ND	%	0.01	0.1
Benzyl butyl phthalate (BBP)	85-68-7	ND	ND	ND	ND	ND	%	0.01	0.1
Dibutyl phthalate (DBP)	84-74-2	ND	ND	ND	ND	ND	%	0.01	0.1
Di-isodecyl phthalate (DIDP)	26761-40-0 68515-49-1	ND	ND	ND	ND	ND	%	0.01	0.1
Di-n-hexyl phthalate (DnHP/DHEXP)	84-75-3	ND	ND	ND	ND	ND	%	0.01	0.1
Di-isononyl phthalate (DINP)	28553-12-0 68515-48-0	ND	ND	ND	ND	ND	%	0.01	-
Element/Test Item	CAS No.	14	-	-	-	-	Units	D.L.	Limit
Di-(2-ethylhexyl) phthalate (DEHP)	117-81-7	ND	-	-	-	-	%	0.01	0.1
Benzyl butyl phthalate (BBP)	85-68-7	ND	-	-	-	-	%	0.01	0.1
Dibutyl phthalate (DBP)	84-74-2	ND	-	-	-	-	%	0.01	0.1
Di-isodecyl phthalate (DIDP)	26761-40-0 68515-49-1	ND	-	-	-	-	%	0.01	0.1
Di-n-hexyl phthalate (DnHP/DHEXP)	84-75-3	ND	-	-	-	-	%	0.01	0.1
Di-isononyl phthalate (DINP)	28553-12-0 68515-48-0	ND	-	-	-	-	%	0.01	-

#### Remarks:

D.L. = Detection Limit

ND = Not detected

Tested Component(s): See component list in the last section of this report

