



## TAIZHOU JIARUI PLASTIC CO., LTD.

**Technical Report: (8820)304-0003**

Nov 10, 2020

Date Received: Nov 3, 2020

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TAIZHOU JIARUI PLASTIC CO., LTD.  
KONG HUA AO, YAN JIANG TOWN, LIN HAI, TAI  
ZHOU CITY, ZHEJIANG PROVINCE, CHINA

Sample Description:	WIGGLE WOBBLE CHAIR FEET SET	Sample Size:	1
Style No(s):	WWCF	Buyer:	NOT PROVIDE
Manufacturer:	TAIZHOU JIARUI PLASTIC CO., LTD.	Brand Name:	NOT PROVIDE
Manufacturer Address:	KONG HUA AO, YAN JIANG TOWN, LIN HAI, TAI ZHOU CITY, ZHEJIANG PROVINCE, CHINA	SKN/SKU No.:	NOT PROVIDE
Labeled Age Grade:	NOT RECORD	PO No.:	NOT PROVIDE
Appropriate Age Grade:	NOT REQUESTED	Ref #:	NOT PROVIDE
Client Specified Age Grade:	3+	Test Finished Date:	NOV 10, 2020
Tested Age Grade:	OVER 3 YEARS OF AGE		
Test Starting Date:	NOV 3, 2020		

### EXECUTIVE SUMMARY:

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

- The mechanical hazards requirements of ASTM F963-17, "Standard consumer safety specification for toy safety".
- The flammability requirement of solids under ASTM F963-17 section 4.2 according to Annex A5, "Flammability testing procedure for solids and soft toys".

TO be continued

BUREAU VERITAS SHENZHEN CO.,LTD  
DONGGUAN BRANCH

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Harvey Xue  
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### REMARK

If there are questions or concerns on this report, please contact the following persons:

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**EXECUTIVE SUMMARY:**

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

- Total lead content in substrate materials requirements of Consumer Product Safety Improvement Act (CPSIA) of 2008 Sec. 101(a)(2)
- Total lead content in surface coating requirements of Consumer Product Safety Improvement Act (CPSIA) of 2008 Sec. 101(f).
- Phthalates content in children's toys and child care articles requirements of Consumer Product Safety Improvement Act (CPSIA) of 2008, Section 108(a) and 108(c), 16 CFR 1307.
- Total lead content in surface coating requirement of Client's Specification with reference to California 65.
- Total lead content in substrate materials requirement of Client's Specification with reference to California 65.
- Total cadmium content requirement of Client's Specification with reference to California 65.
- Phthalates content requirements of Client's Specification with reference to California 65.
- Total lead content in surface coating requirements of ASTM F963-17, "Standard Consumer Safety Specification for Toy Safety," Section 4.3.5.1(1).
- Total lead content in substrate requirements of ASTM F963-17, "Standard consumer safety specification for toy safety", Section 4.3.5.2(2)(a).
- Soluble heavy metals content in surface coating requirements of ASTM F963-17, "Standard Consumer Safety Specification for Toy Safety," Section 4.3.5.1(2).
- Soluble heavy metals content in substrate requirements of ASTM F963-17, "Standard Consumer Safety Specification for Toy Safety," Section 4.3.5.2(2)(b).

Note: At the request of the client, the sample(s) was evaluated for use by children 3+.

Note: At the request of the client, the ASTM F963-17 labeling requirement(s) was not evaluated for this submission.



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**Tested Component(s) Description List:**

Test Item(s)	Item / Component Description(s)	Location(s)	Style(s)
I001	White coating	Plastic mat surface	-
I002	Blue plastic	Plastic mat edge	-
I003	Black soft plastic	Plastic mat	-
I004	White wet paint	Parts	-



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**RESULTS:**

**APPROPRIATE AGE GRADE DETERMINATION**

The Appropriate Age Grade is determined with reference to the Age Determination Guidelines of the Consumer Product Safety Commission (CPSC); and the ASTM F963-17, "Standard Consumer Safety Specification on Toy Safety". Annex A1

Note : The most stringent age grade from the Labeled Age Grade and the Appropriate Age Grade will be used for testing.

Note : If the client does not specify an age grade for testing or request Bureau Veritas Consumer Products Services, Inc. to determine an appropriate age grade, the labeled age grade will be used for testing.

**USE AND ABUSE TESTS**

The samples were undergo the tests in accordance with section 8.6 through 8.16, whichever is applicable

<b>Test</b>	<b>Test Parameters</b>	<b>Standard Reference</b>
Impact Test	4 x 3 ft	1500.53(b)
Torque Test	4 in-lbs	1500.53(e)
Tension Test	15 lbs	1500.53(f )
Compression Test	30 lbs	1500.53(g)



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**RESULTS:**

**PHYSICAL AND MECHANICAL HAZARDS (ASTM F963-17)**

Section	Requirement	Result
4.1	Material Quality	M
4.3.7	Stuffing Materials	N/A
4.5	Sound-Producing Toys	N/A
4.6	Small Objects	N/A
4.7	Accessible Edges	M
4.8	Projections	N/A
4.9	Accessible Points	M
4.10	Wires and Rods	N/A
4.11	Nails and Fasteners	N/A
4.12	Plastic Film	N/A
4.13	Folding Mechanisms and Hinges	N/A
4.14	Cords, Straps and Elastics	N/A
4.15	Stability and Over-Load Requirements	N/A
4.16	Confined Spaces	N/A
4.17	Wheels, Tires, and Axles	N/A
4.18	Holes, Clearances and Accessibility of Mechanisms	N/A
4.19	Simulated Protective Devices	N/A
4.20	Pacifiers	N/A
4.21	Projectile Toys	N/A
4.22	Teethers and Teething Toys	N/A
4.23	Rattles	N/A
4.24	Squeeze Toys	N/A
4.25	Battery-Operated Toys (exclude Section 4.25.10 Battery-powered ride-on toys & Section 4.25.11 Toys that Contain Secondary Cells or Secondary Batteries)	N/A
4.26	Toys Intended to be Attached to a Crib or Playpen	N/A
4.27	Stuffed and Beanbag-Type Toys	N/A
4.30	Toy Gun Marking	N/A
4.32	Certain Toys with Nearly Spherical Ends	N/A
4.34	Small Balls	N/A
4.35	Pompoms	N/A
4.36	Hemispheric-Shaped Objects	N/A
4.37	Yo Yo Elastic Tether Toys	N/A
4.38	Magnets	N/A
4.39	Jaw Entrapment in Handles and Steering Wheels	N/A
4.40	Expanding Materials	N/A

M = Meet    NM = Not Meet    N/A = Not Applicable    R = Refer to Comment Section



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**RESULTS:**

**FLAMMABILITY (16 CFR SECTION 1500.3(c)6)(vi))**

Requirement	Test Method Reference	Findings
Burn rate no greater than 0.1 of an inch per second	16 CFR 1500.44	Did not ignite.



**RESULTS:**

**Total Lead Content in Surface Coating – Consumer Product Safety Improvement Act (CPSIA) of 2008 Sec. 101(f)**

Test Method : U.S. CPSC-CH-E1003-09.1:2011

Maximum Allowable Limit :	90 mg/kg
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Test Item(s)	Result	Unit	Conclusion
	Total Lead (Pb)		
I004	ND	mg/kg	PASS

Note / key:

- ND = Not detected
- mg/kg = milligram(s) per kilogram
- Detection Limit (mg/kg) : 10

**Total Lead Content in Substrate Materials – Consumer Product Safety Improvement Act (CPSIA) of 2008 Sec. 101(a)(2)**

Test Method : U.S. CPSC-CH-E1002-08.3:2012 or U.S. CPSC-CH-E1001-08.3:2012

Maximum Allowable Limit :	100 mg/kg
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Test Item(s)	Result	Unit	Conclusion
	Total Lead (Pb)		
I002	ND	mg/kg	PASS
I003	ND	mg/kg	PASS

Note / key:

- ND = Not detected
- mg/kg = milligram(s) per kilogram
- Detection Limit (mg/kg) : 10



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**RESULTS:**

**Phthalates Content in Children's Toys and Child Care Articles – Consumer Product Safety Improvement Act (CPSIA) of 2008, Section 108(a) and 108(c), 16 CFR 1307**

Test Method : With reference to U. S. CPSC-CH-C1001-09.4 (January 17, 2018)

Parameter:	BBP	DBP	DEHP	DINP	DIBP	DnPP	DnHP	DCHP	-
Limit (%):	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-
Test Item(s)	Result (%)								Conclusion
I002	ND	ND	ND	ND	ND	ND	ND	ND	PASS
I003	ND	ND	ND	ND	ND	ND	ND	ND	PASS
I004	ND	ND	ND	ND	ND	ND	ND	ND	PASS

Note / key:

DEHP = Di(2-ethylhexyl) phthalate

DnHP(DHEXP) = Di-n-hexyl phthalate

DnPP(DPENP) = Di-n-pentyl phthalate

ND = Not detected

mg/kg = milligram(s) per kilogram

Detection Limit (%) : Each 0.005

DBP = Dibutyl phthalate

DIBP = Di-iso-butyl phthalate

DCHP = Dicyclohexyl phthalate

% = percent

BBP = Butyl benzyl phthalate

DINP = Di-iso-nonyl phthalate

10000 mg/kg = 1 %





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**RESULTS:**

**Total lead Content in Surface Coating – Client's Specification with reference to California 65**

Test Method : U.S. CPSC-CH-E1003-09.1:2011

Client's Limit :	90 mg/kg
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Test Item(s)	Result	Unit	Conclusion
	Total Lead (Pb)		
I004	ND	mg/kg	PASS

Note / key:

- ND = Not detected
- mg/kg = milligram(s) per kilogram
- Detection Limit (mg/kg) : 10

**Total Lead Content in Substrate Materials – Client's Specification with reference to California 65**

Test Method : U.S. CPSC-CH-E1001-08.3:2012 or U.S. CPSC-CH-E1002-08.3:2012

Maximum Allowable Limit :	100 mg/kg
---------------------------	-----------

Test Item(s)	Result	Unit	Conclusion
	Total Lead (Pb)		
I002	ND	mg/kg	PASS
I003	ND	mg/kg	PASS

Note / key:

- ND = Not detected
- mg/kg = milligram(s) per kilogram
- Detection Limit (mg/kg) : 10



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**RESULTS:**

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**Total Cadmium Content – Client's Specification with reference to California 65**

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Test Method : BS EN 1122: 2001, Method B or Acid digestion followed by Atomic Absorption Spectrophotometry or Inductively Coupled Plasma Spectrometry.

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Client's Limit :	100 mg/kg
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Test Item(s)	Result	Unit	Conclusion
	Total Cadmium (Cd)		
I002	ND	mg/kg	PASS
I003	ND	mg/kg	PASS
I004	ND	mg/kg	PASS

Note / key:

ND = Not detected

mg/kg = milligram(s) per kilogram

Detection Limit (mg/kg) : 10



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**RESULTS:**

**Phthalates Content – Client’s Specification with reference to California 65**

Test Method : With reference to U. S. CPSC-CH-C1001-09.4 (January 17, 2018)

Parameter:	BBP	DBP	DEHP	DNOP	DINP	DIDP	DnHP	DIBP	-
Limit (%):	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-
Test Item(s)	Result (%)								Conclusion
I002	ND	ND	ND	ND	ND	ND	ND	ND	PASS
I003	ND	ND	ND	ND	ND	ND	ND	ND	PASS
I004	ND	ND	ND	ND	ND	ND	ND	ND	PASS

Note / key:

BBP = Butyl benzyl phthalate

DNOP = Di-n-octyl phthalate

DnHP = Di-n-hexyl phthalate

ND = Not detected

mg/kg = milligram(s) per kilogram

Detection Limit (%) : Each 0.005

DBP = Dibutyl phthalate

DINP = Di-iso-nonyl phthalate

DIBP = Di-iso-butyl phthalate

% = percent

DEHP = Di(2-ethylhexyl) phthalate

DIDP = Di-iso-decyl phthalate

10000 mg/kg = 1 %



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**RESULTS:**

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**Total Lead Content in Surface Coating – ASTM International Standard ASTM F963-17, Section 4.3.5.1(1)**

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Test Method : ASTM International Standard ASTM F963-17, Section 8.3.1 and Annex A7.

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Maximum Allowable Limit :	90 mg/kg
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Test Item(s)	Result	Unit	Conclusion
	Total Lead (Pb)		
I004	ND	mg/kg	PASS

Note / key:

ND = Not detected

mg/kg = milligram(s) per kilogram

Detection Limit (mg/kg) : 10

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**Total Lead Content in Substrate – ASTM International Standard ASTM F963-17, Section 4.3.5.2(2)(a)**

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Test Method : ASTM International Standard ASTM F963-17, Section 8.3.1 and Annex A7.

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Maximum Allowable Limit :	100 mg/kg
---------------------------	-----------

Test Item(s)	Result	Unit	Conclusion
	Total Lead (Pb)		
I002	ND	mg/kg	PASS
I003	ND	mg/kg	PASS

Note / key:

ND = Not detected

mg/kg = milligram(s) per kilogram

Detection Limit (mg/kg) : 10



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**RESULTS:**

**Soluble Heavy Metals Content in Surface Coating – ASTM F963-17, Section 4.3.5.1(2)**

Test Method : ASTM International Standard ASTM F963-17, Section 8.3.2 to 8.3.4

Analyte	As	Ba	Cd	Cr	Hg	Pb	Sb	Se
Max. Limit (mg/kg)	25	1000	75	60	60	90	60	500
Analytical Correction	60%	30%	30%	30%	50%	30%	60%	60%

Analyte	As	Ba	Cd	Cr	Hg	Pb	Sb	Se	Mass of Trace Amount	Conclusion
Test Item(s)	Result (mg/kg)								(g)	
I001	ND	ND	ND	ND	ND	ND	ND	ND	-	PASS

Note / key:

As = Arsenic

Ba = Barium

Cd = Cadmium

Cr = Chromium

Hg = Mercury

Pb = Lead

Sb = Antimony

Se = Selenium

ND = Not detected

g = gram(s)

% = percent

mg/kg = milligram(s) per kilogram

Detection Limit (mg/kg) : As : 2.5; Ba : 100; Cd : 7.5; Each (Cr, Hg, & Sb) : 6.0; Pb : 9.0; Se : 50



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**RESULTS:**

**Soluble Heavy Metals Content in Substrate –ASTM F963-17, Section 4.3.5.2(2)(b)**

Test Method : ASTM International Standard ASTM F963-17, Section 8.3.5 (Excluding 8.3.5.5(3))

Analyte	As	Ba	Cd	Cr	Hg	Pb	Sb	Se
Max. Limit of Type I (mg/kg)	25	1000	75	60	60	90	60	500
Max. Limit of Type II (mg/kg)	25	250	50	25	25	90	60	500
Analytical Correction	60%	30%	30%	30%	50%	30%	60%	60%

Analyte	As	Ba	Cd	Cr	Hg	Pb	Sb	Se	Mass of Trace Amount	Conclusion
Test Item(s)	Result (mg/kg)								(g)	
Type I: Substrate other than modeling clay										
I002	ND	ND	ND	ND	ND	ND	ND	ND	-	PASS
I003	ND	ND	ND	ND	ND	ND	ND	ND	-	PASS

Note / key:

As = Arsenic                      Ba = Barium                      Cd = Cadmium                      Cr = Chromium  
 Hg = Mercury                      Pb = Lead                      Sb = Antimony                      Se = Selenium  
 ND = Not detected                      g = gram(s)                      % = percent  
 mg/kg = milligram(s) per kilogram (ppm=parts per million)

Detection Limit (mg/kg) :

For Type I – As : 2.5; Ba : 100; Cd : 7.5; Each (Cr, Hg, & Sb) : 6.0; Pb : 9.0; Se : 50

For Type II – Each (As, Cr & Hg) : 2.5; Ba : 25; Cd : 5.0; Sb : 6.0; Pb : 9.0; Se : 50

Remark:

- Textiles (natural or synthetic) are exempted for lead content requirement according to clarification of Toy Industry Association for ASTM F963-17. The lead content analysis result of corresponding material herein is for client's reference only.

**RESULTS:**



END OF REPORT