

TAIZHOU JIARUI PLASTIC CO., LTD.

Nov 11, 2020 **Technical Report:** (8820)304-0002 Date Received: Nov 3, 2020 Page 1 of 15

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

Sample Description: **BOUNCYBAND**

Style No(s): N/A Sample Size:

NOT PROVIDE Manufacturer: TAIZHOU JIARUI PLASTIC CO., LTD. Buyer: Manufacturer Address: KONG HUA AO, YAN JIANG TOWN, **NOT PROVIDE** Brand Name:

LIN HAI, TAI ZHOUCITY, ZHEJIANG

PROVINCE, CHINA

NOT PROVIDE Labeled Age Grade: NOT RECORD SKN/SKU No.: Appropriate Age Grade: NOT REQUESTED PO No.: **NOT PROVIDE** Ref#: **NOT PROVIDE**

Client Specified Age

Grade: Tested Age Grade: **OVER 3 YEARS OF AGE**

NOV 00, 2020 Test Starting Date: Test Finished Date: NOV 11, 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".
- Total lead content in surface coating requirements of Consumer Product Safety Improvement Act (CPSIA) of 2008 Sec. 101(f).

To be continued

BUREAU VERITAS SHENZHEN CO.,LTD DONGGUAN BRANCH

Harvey Xue

Manager, Analytical Lab

BUREAU VERITAS SHENZHEN CO.,LTD

DONGGUAN BRANCH

Xuechao Li

Supervisor, Toys Lab

RT/ Kate zhang / Nicky le

REMARK

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

(86) 0769 89952999 Ext. 8175 CPSAnalytical.DG@bureauveritas.com Report Enquiry:

Business Contact: (86) 0769 85893595

This report shall not be reproduced except in full, without the written approval of our laboratory.



TAIZHOU JIARUI PLASTIC CO., LTD. Technical Report: **(8820)304-0002** Nov 11, 2020 Page 2 of 15

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)
- 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.



TAIZHOU JIARUI PLASTIC CO., LTD. Technical Report: **(8820)304-0002** Nov 11, 2020 Page 3 of 15

Tested Component(s) Description List:

Test Item(s)	Item / Component Description(s)	Location(s)	Style(s)
1001	White coating	Plastic mat surface	-
1002	Blue plastic	Plastic tube	-
1003	Black plastic	Plastic tube	-
1004	Blue plastic hook	Hook	-
1005	Black soft plastic chain	Chain	-
1006	Black soft plastic	Connect	-
1007	Black soft plastic	Hook base	-
1008	Black hook and loop fasteners	Velcro	-
1009	White/black fabric	Label	-
1010	Black fabric/black thread	Hook base	-
1011	White wet paint	Parts	-



TAIZHOU JIARUI PLASTIC CO., LTD. Technical Report: **(8820)304-0002** Nov 11, 2020 Page 4 of 15

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				
Test Test Parameters Standard Reference				
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)		



TAIZHOU JIARUI PLASTIC CO., LTD. Technical Report: **(8820)304-0002** Nov 11, 2020 Page 5 of 15

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	M
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



TAIZHOU JIARUI PLASTIC CO., LTD. Technical Report: **(8820)304-0002** Nov 11, 2020 Page 6 of 15

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	Most rapid burn rate less than 0.1 of an inch per second.



TAIZHOU JIARUI PLASTIC CO., LTD. Technical Report: **(8820)304-0002** Nov 11, 2020 Page 7 of 15

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
------------------------------	----------

Test Item(s)	Result	Linit	Conclusion	
	Total Lead (Pb)	Unit	Conclusion	
1011	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

Test Item(s)	Result	1.1-:4	Conclusion	
	Total Lead (Pb)	Unit		
1002+1003+1004	ND	mg/kg	PASS	
1005+1006+1007	ND	mg/kg	PASS	

Note / key:

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



TAIZHOU JIARUI PLASTIC CO., LTD. Technical Report: **(8820)304-0002** Nov 11, 2020 Page 8 of 15

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)				Res	ult (%)				Conclusion
1002+1003+1004	ND	ND	ND	ND	ND	ND	ND	ND	PASS
1005	ND	ND	ND	ND	ND	ND	ND	ND	PASS
1006	ND	ND	0.037	ND	ND	ND	ND	ND	PASS
1007	ND	ND	0.015	ND	ND	ND	ND	ND	PASS
I011	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 %



TAIZHOU JIARUI PLASTIC CO., LTD. Technical Report: **(8820)304-0002** Nov 11, 2020 Page 9 of 15

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

Toot Itom(a)	Result		Conclusion	
Test Item(s)	Total Lead (Pb)	Unit Conclusion		
1011	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

Toot Itom(a)	Result	Unit	Conclusion
Test Item(s)	Total Lead (Pb)		
1002+1003+1004	ND	mg/kg	PASS
1005+1006+1007	ND	mg/kg	PASS
1008	ND	mg/kg	PASS
1009	ND	mg/kg	PASS
1010	ND	mg/kg	PASS

Note / key:

ND = Not detected

mg/kg = milligram(s) per kilogram Detection Limit (mg/kg) : 10



TAIZHOU JIARUI PLASTIC CO., LTD. Technical Report: **(8820)304-0002** Nov 11, 2020 Page 10 of 15

RESULTS:

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

Test Method : BS EN 1122: 2001, Method B or Acid digestion followed by Atomic Absorption

Spectrophotometry or Inductively Coupled Plasma Spectrometry.

Client's Limit: 100 mg/kg

Test Item(s)	Result	l l=it	Conclusion	
	Total Cadmium (Cd)	Unit		
1002+1003+1004	ND	mg/kg	PASS	
1005+1006+1007	ND	mg/kg	PASS	
I011	ND	mg/kg	PASS	

Note / key:

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



TAIZHOU JIARUI PLASTIC CO., LTD. Technical Report: **(8820)304-0002** Nov 11, 2020 Page 11 of 15

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
1002+1003+1004	ND	ND	ND	ND	ND	ND	ND	ND	PASS
1005	ND	ND	ND	ND	ND	ND	ND	ND	PASS
1006	ND	ND	0.037	ND	ND	ND	ND	ND	PASS
1007	ND	ND	0.015	ND	ND	ND	ND	ND	PASS
I011	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 %



TAIZHOU JIARUI PLASTIC CO., LTD. Technical Report: **(8820)304-0002** Nov 11, 2020 Page 12 of 15

RESULTS:

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

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

Maximum
Allowable Limit : 90 mg/kg

Test Item(s)	Result	Unit	Canalysian
	Total Lead (Pb)	Unit	Conclusion
I011	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 - ASTM International Standard ASTM F963-17, Section 4.3.5.2(2)(a)

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

Maximum
Allowable Limit : 100 mg/kg

Tost Itom(s)	Result	Lloit	Conclusion
Test Item(s)	Total Lead (Pb)	Unit	Conclusion
1002+1003+1004	ND	mg/kg	PASS
1005+1006+1007	ND	mg/kg	PASS

Note / key:

ND = Not detected

mg/kg = milligram(s) per kilogram Detection Limit (mg/kg) : 10



TAIZHOU JIARUI PLASTIC CO., LTD. Technical Report: **(8820)304-0002** Nov 11, 2020 Page 13 of 15

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	Ва	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	Ва	Cd	Cr	Hg	Pb	Sb	Se	Mass of Trace Amount	Conclusion
Test Item(s)				Result	(mg/kg)				(g)	
1001	ND	ND	ND	ND	ND	ND	ND	ND	-	PASS

Note / key:

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



TAIZHOU JIARUI PLASTIC CO., LTD. Technical Report: **(8820)304-0002** Nov 11, 2020 Page 14 of 15

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	Ва	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	Ва	Cd	Cr	Hg	Pb	Sb	Se	Mass of Trace Amount	Conclusion
Test Item(s)				Result	(mg/kg)				(g)	
Type I: Subst	e I: Substrate other than modeling clay									
1002	ND	ND	ND	ND	ND	ND	ND	ND	-	PASS
1003	ND	ND	ND	ND	ND	ND	ND	ND	•	PASS
1004	ND	ND	ND	ND	ND	ND	ND	ND	-	PASS
1005	ND	ND	ND	ND	ND	ND	ND	ND	•	PASS
1006	ND	ND	ND	ND	ND	ND	ND	ND		PASS
1007	ND	ND	ND	ND	ND	ND	ND	ND	-	PASS
1008	ND	2	ND	ND	ND	ND	ND	ND	-	PASS
1009	ND	ND	ND	ND	ND	ND	6	ND	-	PASS
1010	ND	ND	ND	ND	ND	ND	ND	ND	-	PASS

Note / key:

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.



TAIZHOU JIARUI PLASTIC CO., LTD. Technical Report: **(8820)304-0002** Nov 11, 2020 Page 15 of 15

RESULTS:



END OF REPORT