



CONSUMER PRODUCTS SERVICES DIVISION

ZHEJIANG KAISI OUTDOOR PRODUCTS CO., LTD

Technical Report: (6620)288-0775(REVISED)

November 02, 2020

Date Received: October 14, 2020

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This report is amendment of and supersedes the previous (6620)288-0775 dated October 19, 2020

ZHEJIANG KAISI OUTDOOR PRODUCTS CO., LTD
F16, ROOM1602, JIANSHE BUILDING, OUHAI, WENZHOU, ZHEJIANG

Sample Description:	SWING	Sample Size:	2 SET
Vendor:	ZHEJIANG KAISI OUTDOOR PRODUCTS CO., LTD	Style No:	N/A
Manufacturer:	N/A	SKU No:	N/A
Buyer:	N/A	PO No.:	N/A
Labeled Age Grade:	NONE	Assortment No.:	N/A
Appropriate Age Grade:	NOT REQUESTED	Country of Destination:	THE U.S.A.
Client Specified Age Grade:	FROM 3 TO 12 YEARS OF AGE	Country of Origin:	CHINA
Tested Age Grade:	FROM 3 TO 12 YEARS OF AGE		
UPC:	N/A		

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 labelling requirements of ASTM F963-17, "Standard consumer safety specification for toy safety".
- The flammability requirements of 16 CFR 1500.3(c)(6)(vi), "Flammable solid" (FHSA regulations).
- The total lead content of 90ppm requirements of 16 CFR 1303, "Ban of lead-containing paint and certain consumer products bearing lead-containing paint" as mandated by Congress in section 101(f) of the Consumer Products Safety Improvement Act (CPSIA) of 2008, Public Law 110-314.
- The total lead content of 100ppm requirements in substrate materials (Consumer Products Safety Improvement Act (CPSIA) of 2008).
- The initial total heavy metals content analysis for 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).
- The initial total heavy metals content analysis for 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).
- The 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).
- The total lead content requirements in children products according to the California Proposition 65 settlements of Alameda Superior Court RG 07356892.
- 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).
- The BBP, DBP, DEHP, DnHP and DIDP content requirements in toys, child care articles and watches according to the California Proposition 65 settlements of County of Sacramento case number 07AS04683, and the Alameda Superior Court case numbers BG07350969, RG08367601, RG07351032 and RG08378050.

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NOTE:

1. The sample is tested for "FROM 3 TO 12 YEARS OF AGE" as the client's request.
2. As per client's request, add the testing on the labelling requirements of ASTM F963-17 in the revised report.

BVCPS (SHANGHAI) GENERAL CONTACT INFORMATION FOR THIS REPORT

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BUREAU VERITAS

CONSUMER PRODUCTS SERVICE DIVISION (SHANGHAI)

Laboratory Test location:

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LEON DENG

PRODUCT LINE MANAGER (TOY DIVISION)



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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
Tip Over	3 times	1500.53(b)(4)(i)
Torque	4 in-lbs	1500.53(e)
Tension	15 lbs	1500.53(f)



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	M
4.12	Plastic Film	M
4.13	Folding Mechanisms and Hinges	N/A
4.14	Cords, Straps and Elastics	N/A
4.15	Stability and Over-Load Requirements	M
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



LABELING AND INSTRUCTIONAL REQUIREMENT (ASTM F963-17)

Section	Requirement	Result
5.4 & 5.3	Aquatic Toys	N/A
5.5 & 5.3	Crib and Playpen Toys	N/A
5.6 & 5.3	Mobiles	N/A
5.7 & 5.3	Stroller and Carriage Toys	N/A
5.8 & 5.3	Toys Intended to be Assembled by an Adult	N/A
5.9 & 5.3	Simulated Protective Devices	N/A
5.10 & 5.3	Toys with Functional Sharp Edges or Sharp Points	N/A
5.11	Small Objects, Small Balls, Marbles and Balloons (16 CFR 1500.19)	N/A
5.12	Toy Caps (16CFR1500.86)	N/A
5.13	Art Materials (16 CFR 1500.14(b)(8))	N/A
5.15	Battery-Operated Toys (exclude 5.15.1)	N/A
5.15.1 & 5.3	Battery-Powered Ride-On Toys	N/A
5.16	Promotional Materials	M
5.17 & 5.3	Magnets	N/A
6.1	Definition and Description	M
6.2	Crib and Playpen Toys	N/A
6.3	Mobiles	N/A
6.4 & 5.3	Toys Intended to be Assembled by an Adult	N/A
6.5	Battery-Operated Toys	N/A
6.6	Battery-Powered Ride-On Toys	N/A
6.7	Toys in Contact with Food	N/A
7.1	Producer's Name and Address	M
7.2	Battery-Powered Ride-on Toys	N/A

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

FLAMMABILITY (16 CFR SECTION 1500.39(c)(6)(vi))

Requirement	Test Method Reference	Findings
Burn rate no greater than 0.1 of an inch per second	16 CFR 1500.44	Ignited but Self-Extinguished



Tested Component(s) Breakdown List

Sample Identity	Color / Component	Location	Style
1	Black coating on metal	Thick pole	/
2	Black coating on metal	Thin pole	/
3	Black plastic rope	/	/
4	Red plastic rope	/	/
5	Yellow plastic rope	/	/
6	Blue plastic rope	/	/
7	Green plastic rope	/	/
8	Black plastic	Agal	/
9	Black sponge	/	/
10	Silvery metal remove coating	Thick pole	Non-small part
11	Silvery metal remove coating	Thin pole	Non-small part
12	Silvery metal	Eight words ring	Non-small part
13	Silvery metal	Ring	Non-small part
14	Silvery metal	Hook	Non-small part
15	Silvery metal	Cushion	/
16	Silvery metal	Nut	/



TOTAL LEAD CONTENT IN SURFACE COATING ("Ban of Lead-containing paint and certain consumer products bearing Lead-containing paint", Consumer Product Safety Improvement Act (CPSIA) of 2008)

Method: : 16 CFR 1303/Consumer Product SafeTJ Improvement Act of 2008 / CPSC-CH-E1003-09.1 / CPSPD-AN-00001-MTHD

Parameter	Unit	Detection Limit	Result		Limit
			1+2		
Pb	mg/kg	10	<10		<90
Conclusion	-	-	PASS		-

LT = Less Than mg/kg = milligrams per kilogram (ppm = parts per million) * = Average of duplicate analyses Potential = Estimated lead content per component is based on calculation by component individual weight

TOTAL LEAD CONTENT IN SUBSTRATE (100PPM) (CONSUMER PRODUCT SAFETY IMPROVEMENT ACT (CPSIA) OF 2008)

Method: : U.S. CPSC-CH-E1001-08.1 (June 21, 2010) or U.S. CPSC-CH-E1002-08.1 (June 21, 2010).

Parameter	Unit	Detection Limit	Result			Limit
			3+4+5	6+7	8	
Lead (Pb)	mg/kg	10	<10	<10	<10	<100
Conclusion	-	-	PASS	PASS	PASS	-

Parameter	Unit	Detection Limit	Result			Limit
			9	10	11	
Lead (Pb)	mg/kg	10	<10	20.5	15.4	<100
Conclusion	-	-	PASS	PASS	PASS	-

Parameter	Unit	Detection Limit	Result			Limit
			12	13	14	
Lead (Pb)	mg/kg	10	15.7	24.4	10.8	<100
Conclusion	-	-	PASS	PASS	PASS	-

Parameter	Unit	Detection Limit	Result		Limit
			15	16	
Lead (Pb)	mg/kg	10	13.3	15	<100
Conclusion	-	-	PASS	PASS	-

LT = Less Than mg/kg = milligrams per kilogram (ppm = parts per million) * = Average of duplicate analyses



TOTAL HEAVY METALS CONTENT – INITIAL ANALYSIS FOR SOLUBLE HEAVY METALS CONTENT IN SUBSTRATE (ASTM F963-17, Section 4.3.5.2(2)(b))

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

Parameter	Unit	Detection Limit	Result			Limit
			3+4+5	6+7	8	
Antimony (Sb)	mg/kg	10	<10	<10	<10	<60
Arsenic (As)	mg/kg	5	<5	<5	<5	<25
Barium (Ba)	mg/kg	10	42.4	<10	<10	<1000
Cadmium (Cd)	mg/kg	10	<10	<10	<10	<75
Chromium (Cr)	mg/kg	10	<10	<10	<10	<60
Lead(Pb)	mg/kg	10	<10	<10	<10	<90
Mercury(Hg)	mg/kg	10	<10	<10	<10	<60
Selenium(Se)	mg/kg	10	<10	<10	<10	<500
Conclusion	-	-	PASS	PASS	PASS	-

Parameter	Unit	Detection Limit	Result	Limit
			9	
Antimony (Sb)	mg/kg	10	<10	<60
Arsenic (As)	mg/kg	5	<5	<25
Barium (Ba)	mg/kg	10	12.5	<1000
Cadmium (Cd)	mg/kg	10	<10	<75
Chromium (Cr)	mg/kg	10	<10	<60
Lead(Pb)	mg/kg	10	<10	<90
Mercury(Hg)	mg/kg	10	<10	<60
Selenium(Se)	mg/kg	10	<10	<500
Conclusion	-	-	PASS	-

mg/kg = milligrams per kilogram (ppm=parts per million)
 ND = None Detected
 Cr = Chromium, Hg = Mercury, Pb = Lead,

LT = Less Than
 As = Arsenic, Ba = Barium, Cd = Cadmium,
 Sb = Antimony, Se = Selenium



TOTAL HEAVY METALS CONTENT - INITIAL ANALYSIS FOR SOLUBLE HEAVY METALS CONTENT IN SURFACE COATING (ASTM F963-17, Section 4.3.5.1(2))

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

Parameter	Unit	Detection Limit	Result	Limit
			1+2	
Antimony (Sb)	mg/kg	10	<10	<60
Arsenic (As)	mg/kg	5	<5	<25
Barium (Ba)	mg/kg	10	5690	<1000
Cadmium (Cd)	mg/kg	10	<10	<75
Chromium (Cr)	mg/kg	10	<10	<60
Lead (Pb)	mg/kg	10	<10	<90
Mercury (Hg)	mg/kg	10	<10	<60
Selenium (Se)	mg/kg	10	<10	<500
Conclusion	-	-	DATA	-

mg/kg = milligrams per kilogram (ppm=parts per million) LT = Less Than
 As = Arsenic, Ba = Barium, Cd = Cadmium, Cr = Chromium, Hg = Mercury, Pb = Lead,
 Sb = Antimony, Se = Selenium

SOLUBLE HEAVY METALS CONTENT IN SURFACE COATING (ASTM F963-17, Section 4.3.5.1(2))

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

Parameter	Unit	Detection Limit	Result		Limit
			1	2	
Antimony (Sb)	mg/kg	5	<5	<5	<60
Arsenic (As)	mg/kg	2.5	<2.5	<2.5	<25
Barium (Ba)	mg/kg	5	412	388	<1000
Cadmium (Cd)	mg/kg	5	<5	<5	<75
Chromium (Cr)	mg/kg	5	<5	<5	<60
Lead (Pb)	mg/kg	5	<5	<5	<90
Mercury (Hg)	mg/kg	5	<5	<5	<60
Selenium (Se)	mg/kg	5	<5	<5	<500
Conclusion	-	-	PASS	PASS	-

LT = Less Than
 mg/kg = milligrams per kilogram (ppm=parts per million)
 Cr = Chromium, Hg = Mercury, Pb = Lead,
 CR = adjusted analytical result
 * = Average of duplicate analysis As = Arsenic,
 Ba = Barium, Cd = Cadmium,
 Sb = Antimony, Se = Selenium



TOTAL LEAD CONTENT IN CHILDREN PRODUCTS (California Proposition 65 settlements of Alameda Superior Court RG 07356892)

Method: : Acid digestion followed by Atomic Absorption Spectrophotometry or Inductively Coupled Plasma Spectrometry

Parameter	Unit	Detection Limit	Result		Limit
			1+2		
Lead(Pb)	mg/kg	10	<10		<90
Conclusion	-	-	PASS		-

Parameter	Unit	Detection Limit	Result			Limit
			3+4+5	6+7	8	
Lead(Pb)	mg/kg	10	<10	<10	<10	<100
Conclusion	-	-	PASS	PASS	PASS	-

Parameter	Unit	Detection Limit	Result			Limit
			9	10	11	
Lead(Pb)	mg/kg	10	<10	20.5	15.4	<100
Conclusion	-	-	PASS	PASS	PASS	-

Parameter	Unit	Detection Limit	Result			Limit
			12	13	14	
Lead(Pb)	mg/kg	10	15.7	24.4	10.8	<100
Conclusion	-	-	PASS	PASS	PASS	-

Parameter	Unit	Detection Limit	Result		Limit
			15	16	
Lead(Pb)	mg/kg	10	13.3	15	<100
Conclusion	-	-	PASS	PASS	-

LT = Less Than mg/kg = milligrams per kilogram
 (ppm=parts per million)

* = Average of duplicate analyses



PHTHALATES CONTENT IN CHILDREN'S TOYS AND CHILDCARE ARTICLES (Consumer Product Safety Improvement Act (CPSIA) of 2008 Sec. 108(a) Prohibition On Sale of Certain Products Containing Specified Phthalates - BBP / DBP / DEHP / DIBP / DINP / DNHP / DNPP / DCHP CONTENT) Effective: April 25, 2018

Method: : With reference to U. S. CPSC-CH-C1001-09.3 (April 1, 2010).

Parameter	CAS No.	Unit	Detection Limit	Result			Limit
				1+2	3+4+5	6+7	
BBP	85-68-7	%	0.005	<0.005	<0.005	<0.005	<0.1
DBP	84-74-2	%	0.005	<0.005	<0.005	<0.005	<0.1
DEHP	117-81-7	%	0.005	<0.005	<0.005	<0.005	<0.1
DINP	28553-12-0	%	0.005	<0.005	<0.005	<0.005	<0.1
DIBP	84-69-5	%	0.005	<0.005	<0.005	<0.005	<0.1
DnPP	131-18-0	%	0.005	<0.005	<0.005	<0.005	<0.1
DnHP	84-75-3	%	0.005	<0.005	<0.005	<0.005	<0.1
DCHP	84-61-7	%	0.005	<0.005	<0.005	<0.005	<0.1
Conclusion	-	-	-	PASS	PASS	PASS	-

Parameter	CAS No.	Unit	Detection Limit	Result		Limit
				8	9	
BBP	85-68-7	%	0.005	<0.005	<0.005	<0.1
DBP	84-74-2	%	0.005	<0.005	<0.005	<0.1
DEHP	117-81-7	%	0.005	<0.005	<0.005	<0.1
DINP	28553-12-0	%	0.005	<0.005	<0.005	<0.1
DIBP	84-69-5	%	0.005	<0.005	<0.005	<0.1
DnPP	131-18-0	%	0.005	<0.005	<0.005	<0.1
DnHP	84-75-3	%	0.005	<0.005	<0.005	<0.1
DCHP	84-61-7	%	0.005	<0.005	<0.005	<0.1
Conclusion	-	-	-	PASS	PASS	-



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BBP/DBP/DEHP/DnHP/DIDP PHTHALATES CONTENT REQUIREMENTS IN TOYS, CHILD CARE ARTICLES AND WATCHES (California Proposition 65 settlements of County of Sacramento case number 07AS04683, and the Alameda Superior Court case numbers BG07350969, RG08367601, RG07351032 and RG08378050)

Method: Sacramento Superior Court 07AS04683 / Alameda Superior Court BG07350969 /
 : RG08367601 / RG07351032 / RG08378050 / Solvent extraction with GC-MS/HPLC-MS
 analysis / CPSD-AN-00108-MTHD

Parameter	CAS No.	Unit	Detection Limit	Result			Limit
				1+2	3+4+5	6+7	
DnHP	84-75-3	%	0.005	ND	ND	ND	<0.1
DIDP	26761-40-0	%	0.005	ND	ND	ND	<0.1
DBP	84-74-2	%	0.005	ND	ND	ND	<0.1
BBP	85-68-7	%	0.005	ND	ND	ND	<0.1
DEHP	117-81-7	%	0.005	ND	ND	ND	<0.1
Conclusion	-	-	-	PASS	PASS	PASS	-

Parameter	CAS No.	Unit	Detection Limit	Result		Limit
				8	9	
DnHP	84-75-3	%	0.005	ND	ND	<0.1
DIDP	26761-40-0	%	0.005	ND	ND	<0.1
DBP	84-74-2	%	0.005	ND	ND	<0.1
BBP	85-68-7	%	0.005	ND	ND	<0.1
DEHP	117-81-7	%	0.005	ND	ND	<0.1
Conclusion	-	-	-	PASS	PASS	-

Detection Limit:

Results reported in percentage

DBP = Dibutyl phthalate (0.005%)

ND = None detected

DnHP = Di-n-hexyl phthalate (0.005%)

BBP = Butyl benzyl phthalate (0.005%)

LT = Less than

DEHP = Di(2-ethylhexyl) phthalate (0.005%)

DIDP = Di-iso-decyl phthalate (0.005%)





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