

Lab & Technical Support

Manager

REPORT NO.: EFSN17091830C-C

DATE: OCT. 13, 2017

Lab Manager

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TEST REPORT

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<u>APPLICANT</u>	: LOONE	Y LABS	
ADDRESS	: 4920 NI _A MD 2074	AGARA ROAD, SUITE 405 0 40	OLLEGE PARK,
SAMPLE DESCRIPTION	: ZENDO		
STYLE / ITEM NO.	: LOO-08	2	
MANUFACTURER	: GPHK		
COUNTRY OF ORIGIN	: CHINA		
COUNTRY OF DESTINATION	: US,EU		
AGE REQUESTED ON APPLICATION FO	RM : 12 AGE	3	
LABELED AGE GRADE	: 12 AGES	3	
AGE GRADE APPLIED IN TESTING	: OVER 8	YEARS	
SAMPLE RECEIVED DATE	: SEP. 29	, 2017	
TEST PERIOD	: OCT. 09	, 2017 TO OCT. 12, 2017	
RESULT SUMMARY	: PLEASE	REFER TO NEXT PAGE(S)).
******FOR FURTHER DETAILS, I	PLEASE REFER TO) THE FOLLOWING PAGE(S)*************
EUROFINS TESTING TECHNOLOGY (SHEN	ZHEN) CO. LTD.		
Horny Chen	Geolu	e fyl	sons
Harry Chen	Coco Luo	Lyd	ia Wang

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RESULT SUMMARY

TEST(S) REQUESTED BY APPLICANT:	RESULT
- EN 71 – 1: 2014 Mechanical and physical properties	PASS
- EN 71 – 2: 2011 + A1: 2014 Flammability	PASS
- EN 71 – 3: 2013 + A1: 2014 Migration of Certain Elements	PASS
- Total Cadmium Content according to Entry 23 of Annex XVII to Regulation (EC) No 1907/2006 and its amendments Regulation (EC) No 552/2009, (EU) No 494/2011, (EU) No 835/2012 and (EU) No 2016/217.	PASS
- Phthalates according to Entry 51 and 52 of Regulation (EC) No 552/2009 amending Annex XVII of REACH Regulation (EC) No 1907/2006 (previously restricted under Directive 2005/84/EC).	PASS
- Packaging Waste according to 94/62/EC and its amendments.	PASS
In accordance with ASTM F963-16 Standard Consumer Safety Specification for Toy Safety:	-
Physical and Mechanical Test	PASS
Flammability Test	PASS
Total Lead Content and Migration of Certain Elements Test.	PASS
- Tracking Labels for Children's Products, CPSIA Section 103.	PASS
- Consumer Product Safety Commission 16 CFR CH. II:	-
- Physical and Mechanical Test	PASS
- 16 CFR 1500.44 Flammability test	PASS
- Total Lead Content according to US 16 CFR Part 1303.	PASS
_ Total Lead Content according to US Consumer Product Safety Improvement Act 2008 (CPSIA).	PASS
- Total Lead Content according to California Proposition 65, Alameda Superior Court, BG07350969 and RG08378050 / San Francisco Superior Court, 07-462991	PASS
Phthalates according to US Consumer Product Safety Improvement Act 2008 (CPSIA).	PASS
Phthalates according to California Proposition 65, Sacramento Superior Court, - 07AS04683 / Alameda Superior Court, BG07350969, RG08367601, RG07351032 and RG08378050.	PASS
 Packaging Waste according to the United States Toxics in Packaging Clearinghouse (TPCH) Model Toxics in Packaging Legislation in 1992, originally drafted by the Source Reduction Council of CONEG in 1989. 	PASS



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Material list

Testing material No.	Component	Material	Colour
1a	Printing on box, cards and books	Printing	Multicolor
1b	Box	Paper/ glue	White and grey/ transparent
1c	Cards	Paper	White
1d	Books	Paper	White
2	Staple	Metal	Silvery
3	Block	Plastic	Transparent yellow
4	Block	Plastic	Transparent red
5	Block	Plastic	Transparent blue
6	Cube	Plastic	Green
7	Disk	Plastic	Black
8	Disk	Plastic	White
9	Clips	Plastic	Green
10	Blister packing	Plastic	Transparent
11	Leaves	Paper/ printing	White/ multicolor
12	Package bag(block, disk and card)	Plastic	Transparent
13	Package bag(clips)	Plastic	Transparent



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EN 71 - 1: 2014 Safety of Toys - Mechanical and physical properties

Clause	Requirement	Result
4	General requirements	
4.1	Material cleanliness	Р
4.2	Assembly	N/A
4.3	Flexible plastic sheeting	N/A
4.4	Toy bags	N/A
4.5	Glass	N/A
4.6	Expanding materials	N/A
4.7	Edges	Р
4.8	Points and metallic wires	Р
4.9	Protruding parts	N/A
4.10.1	Folding and sliding mechanisms	N/A
4.10.2	Driving mechanisms	N/A
4.10.3	Hinges	N/A
4.10.4	Springs	N/A
4.11	Mouth-actuated toys and other toys intended to be put in the mouth	N/A
4.12	Balloons	N/A
4.13	Cords of toy kites and other flying toys	N/A
4.14.1	Toys which a child can enter	N/A
4.14.2	Masks and helmets	N/A
4.15.1	Toys propelled by a child or by other means	N/A
4.15.2	Toy bicycles	N/A
4.15.3	Rocking horses and similar toys	N/A
4.15.4	Toys not propelled by a child	N/A
4.15.5	Toy scooters	N/A



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Clause	Requirement	Result
4.16	Heavy immobile toys	N/A
4.17.1	Projectiles general	N/A
4.17.2	Projectile toys without stored energy	N/A
4.17.3	Projectile toys with stored energy	N/A
4.17.4	Bows and arrows	N/A
4.18	Aquatic toys and inflatable toys	N/A
4.19	Percussion caps specifically designed for use in toys and toys using percussion caps	N/A
4.20	Acoustics	N/A
4.21	Toys containing a non-electrical heat source	N/A
4.22	Small balls	N/A
4.23.1	Magnets general	N/A
4.23.2	Toys other than magnetic/electrical experimental sets intended for children over 8 years	
4.23.3	Magnetic/electrical experimental sets intended for children over 8 years	N/A
4.24	Yo-yo balls	N/A
4.25	Toys attached to food	N/A
5	Toy intended for children under 36 months	
5.1	General requirements	N/A
5.2	Soft-filled toys and soft-filled parts of a toy	N/A
5.3	Plastic sheeting	N/A
5.4	Cords, chains and electrical cables in toys	N/A
5.5	Liquid-filled toys	N/A
5.6	Speed limitation of electrically-driven ride-on toys	N/A
5.7	Glass and porcelain	N/A
5.8	Shape and size of certain toys	N/A



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Clause	Requirement	Result
5.9	Toys comprising monofilament fibres	N/A
5.10	Small balls	N/A
5.11	Play figures	N/A
5.12	Hemispheric-shaped toys	N/A
5.13	Suction cups	N/A
5.14	Straps intended to be worn fully or partially around the neck	N/A
6	Packaging	Р
7	Warnings, markings and instructions for use (Note: It is drawn to your attention that the warnings, precautions and in for use should be given in the national language(s) of the country where is sold. Only English was reviewed)	
7.1	General	Р
7.2	Toys not intended for children under 36 months	N/A
7.3	Latex balloons	N/A
7.4	Aquatic toys	N/A
7.5	Functional toys	N/A
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7.6	Hazardous sharp functional edges and points	N/A
	Hazardous sharp functional edges and points Toys with projectiles which are able to discharge an object other than that provided with the toy	N/A N/A
7.6	Toys with projectiles which are able to discharge an object other than that	
7.6 7.7.1	Toys with projectiles which are able to discharge an object other than that provided with the toy Toys capable of discharging a projectile with a kinetic energy greater than	N/A
7.6 7.7.1 7.7.2	Toys with projectiles which are able to discharge an object other than that provided with the toy Toys capable of discharging a projectile with a kinetic energy greater than 0.08 J	N/A N/A
7.6 7.7.1 7.7.2 7.8	Toys with projectiles which are able to discharge an object other than that provided with the toy Toys capable of discharging a projectile with a kinetic energy greater than 0.08 J Imitation protective masks and helmets	N/A N/A N/A
7.6 7.7.1 7.7.2 7.8 7.9	Toys with projectiles which are able to discharge an object other than that provided with the toy Toys capable of discharging a projectile with a kinetic energy greater than 0.08 J Imitation protective masks and helmets Toy kites	N/A N/A N/A
7.6 7.7.1 7.7.2 7.8 7.9 7.10.1	Toys with projectiles which are able to discharge an object other than that provided with the toy Toys capable of discharging a projectile with a kinetic energy greater than 0.08 J Imitation protective masks and helmets Toy kites Roller skates, inline skates and skateboards	N/A N/A N/A N/A



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Clause	Requirement	Result
7.11	Toys intended to be attached to or strung across a cradle, cot, or perambulator	N/A
7.12	Liquid-filled teethers	N/A
7.13	Percussion caps specifically designed for use in toys	N/A
7.14	Acoustics	N/A
7.15	Toy bicycles	N/A
7.16	Toys intended to bear the mass of a child	N/A
7.17	Toys comprising monofilament fibres	N/A
7.18	Toy Scooters	N/A
7.19	Rocking horses and similar toys	N/A
7.20	Magnetic/electrical experimental sets	N/A
7.21	Toys with electrical cables exceeding 300 mm in length	N/A
7.22	Toys with cords or chains intended for children of 18 months and over but under 36 months	N/A

Note: P = Pass N/A = Not Applicable

The Toys Safety Directive 2009/48/EC contains marking and labeling requirements with respect to CE marking, importer's & manufacturer's name and address, product identification and washing instruction of the toy. These are not part of the EN 71 requirements but are legally required:

Mark	ings and information required by Directive 2009/48/EC	Location	Result
1	CE mark	Packaging	Present
0	Importer's name and address	Packaging	Present
2	Manufacturer's name and address	Packaging	Present
3	Product identification	Packaging	Present
4	Washing/Cleaning instruction	/	Not Applicable



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EN 71 - 2: 2011 + A1: 2014 Safety of Toys - Flammability

Clause	Requirement	Result
4	Requirements	
4.1	General requirements	Р
4.2	Toys to be worn on the head	
4.2.2	Beards, moustaches, wigs etc., made from hair, pile or material with similar features(e.g. free hanging ribbons, paper, cloth strands or other flowing elements), which protrude 50 mm or more from the surface of the toy	N/A
4.2.3	Beards, moustaches, wigs etc., made from hair, pile or material with similar features(e.g. free hanging ribbons, paper, cloth strands or other flowing elements), which protrude less than 50 mm from the surface of the toy	N/A
4.2.4	Full or partial moulded head masks	N/A
4.2.5	Flowing elements of toys to be worn on the head(except those covered by 4.2.2 and 4.2.3), hoods, head-dresses etc. and masks not covered by 4.2.4 which partially or fully cover the head(e.g. fabric and cardboard masks, eye masks, face masks), but excluding those items covered by 4.3	N/A
4.3	Toy disguise costumes and toys intended to be worn by a child in play	N/A
4.4	Toys intended to be entered by a child	N/A
4.5	Soft-filled toys	N/A

Note: P = Pass N/A = Not Applicable



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EN 71-3:2013 + A1: 2014 - Migration of Certain Elements

Test method : With reference to EN 71-3:2013 + A1: 2014 Migration of certain elements.

General Elements analysis was performed by ICP-MS. Soluble Chromium(VI) analysis was performed by IC-UV-Vis. Soluble Organic Tin analysis was performed by GC-MS.

Flowers	Limit(mg/kg)	MDL		Material T	est Resul	t (mg/kg)	
Element	Category III	(mg/kg)	1(a+b)	1(a+c)	1(a+d)	3	4
Soluble Aluminium (Al)	70000	10	763	20	N.D.	27	N.D.
Soluble Antimony (Sb)	560	10	N.D.	N.D.	N.D.	N.D.	N.D.
Soluble Arsenic (As)	47	10	N.D.	N.D.	N.D.	N.D.	N.D.
Soluble Barium (Ba)	18750	10	20	N.D.	N.D.	N.D.	N.D.
Soluble Boron (B)	15000	10	16	N.D.	N.D.	N.D.	N.D.
Soluble Cadmium (Cd)	17	10	N.D.	N.D.	N.D.	N.D.	N.D.
Soluble Chromium III (Cr III)	460	5	N.D. [△]				
Soluble Chromium VI(Cr VI)	0.2	0.2	N.D. [△]				
Soluble Cobalt (Co)	130	10	N.D.	N.D.	N.D.	N.D.	N.D.
Soluble Copper(Cu)	7700	10	N.D.	N.D.	N.D.	N.D.	N.D.
Soluble Lead (Pb)	160	10	N.D.	N.D.	N.D.	N.D.	N.D.
Soluble Manganese (Mn)	15000	10	45	N.D.	N.D.	56	N.D.
Soluble Mercury (Hg)	94	10	N.D.	N.D.	N.D.	N.D.	N.D.
Soluble Nickel (Ni)	930	10	N.D.	N.D.	N.D.	N.D.	N.D.
Soluble Selenium (Se)	460	10	N.D.	N.D.	N.D.	N.D.	N.D.
Soluble Strontium (Sr)	56000	10	40	30	36	N.D.	N.D.
Soluble Tin (Sn)	180000	4.9	N.D.	N.D.	N.D.	N.D.	N.D.
Soluble Organic Tin	12	0.1					
Soluble Zinc (Zn)	46000	10	16	N.D.	N.D.	N.D.	N.D.

Flowers	Limit(mg/kg)	MDL		Material T	est Resul	t (mg/kg)	
Element	Category III	(mg/kg)	5	6	7	8	9
Soluble Aluminium (AI)	70000	10	N.D.	N.D.	N.D.	N.D.	N.D.
Soluble Antimony (Sb)	560	10	N.D.	N.D.	N.D.	N.D.	N.D.
Soluble Arsenic (As)	47	10	N.D.	N.D.	N.D.	N.D.	N.D.
Soluble Barium (Ba)	18750	10	N.D.	46	50	35	N.D.
Soluble Boron (B)	15000	10	N.D.	N.D.	N.D.	N.D.	N.D.
Soluble Cadmium (Cd)	17	10	N.D.	N.D.	N.D.	N.D.	N.D.
Soluble Chromium III (Cr III)	460	5	N.D. [△]	N.D.△	N.D. [△]	N.D. [△]	N.D. [△]
Soluble Chromium VI(Cr VI)	0.2	0.2	N.D. [△]	N.D.△	N.D. [△]	N.D. [△]	N.D. [△]
Soluble Cobalt (Co)	130	10	N.D.	N.D.	N.D.	N.D.	N.D.
Soluble Copper(Cu)	7700	10	N.D.	N.D.	N.D.	N.D.	N.D.
Soluble Lead (Pb)	160	10	N.D.	N.D.	N.D.	N.D.	N.D.
Soluble Manganese (Mn)	15000	10	N.D.	N.D.	N.D.	N.D.	N.D.
Soluble Mercury (Hg)	94	10	N.D.	N.D.	N.D.	N.D.	N.D.
Soluble Nickel (Ni)	930	10	N.D.	N.D.	N.D.	N.D.	N.D.
Soluble Selenium (Se)	460	10	N.D.	N.D.	N.D.	N.D.	N.D.
Soluble Strontium (Sr)	56000	10	N.D.	N.D.	N.D.	N.D.	N.D.
Soluble Tin (Sn)	180000	4.9	N.D.	N.D.	N.D.	N.D.	N.D.
Soluble Organic Tin	12	0.1					
Soluble Zinc (Zn)	46000	10	N.D.	36	12	28	N.D.



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Note: -1 mg/kg = 1 ppm = 0.0001%

- N.D. = Not Detected
- MDL = Method Detection Limit
- Unless specified, determination of Chromium (III) and Chromium (VI) was based on elemental analysis.
- The reported soluble organic tin value was calculated by summation of the migration values of Methyl tin, Butyl tin, Dibutyl tin, Tributyl tin, Tetrabutyl tin, Monooctyl tin, Dioctyl tin, Dipropyl tin, Diphenyl tin and Triphenyl tin.
- -^ΔChromium (III) and Chromium (VI) confirmation test were performed on the tested component.
- Confirmation test of soluble organic tin is not required in case of soluble tin, after conversion, does not exceed the soluble organic tin requirement as specified in EN71-3: 2013 + A1: 2014.

Total Cadmium Content

Test method : EPA 3051A: 2007; EPA 3052: 1996, EPA 6010D: 2014.

Detection limit : 10 mg/kg

Limit : See below - according to Entry 23 of Annex XVII to Regulation (EC) No

1907/2006 and its amendments Regulation (EC) No 552/2009, (EU) No 494/2011, (EU) No 835/2012 and (EU) No 2016/217.

Material(s)	Limit (mg/kg)
- Paints (wet state); - Plastics; - Brazing fillers; - Metal parts in jewelry;	100
 Paints on a painted article; Paints with zinc content exceeding 10% by weight of the paint; Recovered PVC used in article marked with "Contains recovered PVC" or with the designated pictogram. 	1000

Test No.	Material No.	Test result (mg/kg)
Cd-1	1a	N.D.
Cd-2	3+4+5	N.D.
Cd-3	6+9	N.D.
Cd-4	7+8	N.D.
Cd-5	1b	N.D.

Note: -1 mg/kg = 1 ppm = 0.0001%



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Phthalates(REACH)

Test method : Extraction by organic solvent, determination by GC-MS.

Limit : See below - according to Entry 51 and 52 of Regulation (EC) No 552/2009

amending Annex XVII of REACH Regulation (EC) No 1907/2006 (previously

restricted under Directive 2005/84/EC).

Detection limit : 0.005% per substance

A: For toys and childcare articles:

Test No.			Phthalates-1	Phthalates-2	Phthalates-3
Material No.			1a	3+4+5	6+9
Parameter	CAS No.	Unit	Test result	Test result	Test result
Dibutylphthalate (DBP)	84-74-2	%	N.D.	N.D.	N.D.
Benzylbutylphthalate (BBP)	85-68-7	%	N.D.	N.D.	N.D.
Diethylhexylphthalate (DEHP)	117-81-7	%	N.D.	N.D.	N.D.
Sum (DBP + BBP + DEHP)		%	N.D.	N.D.	N.D.
Limit (sum)		%	0.1	0.1	0.1

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

Test No.			Phthalates-1	Phthalates-2	Phthalates-3
Material No.			1a	3+4+5	6+9
Parameter	CAS No.	Unit	Test result	Test result	Test result
Di-n-octylphthalate (DNOP)	117-84-0	%	N.D.	N.D.	N.D.
Diisodecylphthalate (DIDP)	26761-40-0	%	N.D.	N.D.	N.D.
Diisononylphthalate (DINP)	28553-12-0	%	N.D.	N.D.	N.D.
Sum (DNOP+ DIDP+ DINP)		%	N.D.	N.D.	N.D.
Limit (sum)		%	0.1	0.1	0.1



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A: For toys and childcare articles:

Test No.			Phthalates-4	Phthalates-5
Material No.			7+8	1b
Parameter	CAS No.	Unit	Test result	Test result
Dibutylphthalate (DBP)	84-74-2	%	N.D.	N.D.
Benzylbutylphthalate (BBP)	85-68-7	%	N.D.	N.D.
Diethylhexylphthalate (DEHP)	117-81-7	%	N.D.	N.D.
Sum (DBP + BBP + DEHP)		%	N.D.	N.D.
Limit (sum)		%	0.1	0.1

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

Test No.			Phthalates-4	Phthalates-5
Material No.			7+8	1b
Parameter	CAS No.	Unit	Test result	Test result
Di-n-octylphthalate (DNOP)	117-84-0	%	N.D.	N.D.
Diisodecylphthalate (DIDP)	26761-40-0	%	N.D.	N.D.
Diisononylphthalate (DINP)	28553-12-0	%	N.D.	N.D.
Sum (DNOP+ DIDP+ DINP)		%	N.D.	N.D.
Limit (sum)		%	0.1	0.1

Note: -1 mg/kg = 1 ppm = 0.0001%

- N.D. = Not Detected

Packaging Waste(EU)

Test method : Lead (Pb), Cadmium (Cd), Mercury (Hg), Chromium (Cr) - according to

EPA3052: 1996; determination with ICP-OES.

Chromium (VI) Cr(VI) - according to EPA3060A: 1996; determination with

UV/VIS.

Limit : Total: 100 mg/kg – according to 94/62/EC and its amendment.

Detection limit : 10 mg/kg

Test No.	Material No.	Test result (mg/kg)				
Test No.	Material No.	Pb	Cd	Cr(VI)	Hg	Total
PW-1	10	N.D.	N.D.	N.D.	N.D.	<100
PW-2	11	N.D.	N.D.	N.D.	N.D.	<100
PW-3	12	N.D.	N.D.	N.D.	N.D.	<100
PW-4	13	N.D.	N.D.	N.D.	N.D.	<100

Note: -1 mg/kg = 1 ppm = 0.0001%



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ASTM F963-16, Standard Consumer Safety Specification for Toy Safety

Section	Requirement	Result
4	Safety Requirements	
4.1	Material Quality	Р
4.2	Flammability	Р
4.3	Toxicology	•
4.3.1	Hazardous Substances	N/A
4.3.2	Manufacturing and Packaging of Food	N/A
4.3.3	Indirect Food Additives	N/A
4.3.4	Cosmetics	N/A
4.3.5	Total Lead Content and Migration of Certain Elements Test (See data table for detailed results.)	Р
4.3.6	Cosmetics, Liquids, Pastes, Putties, Gels, Powders and Items of Avian Feather Origin	N/A
4.3.7	Stuffing Materials(Visual Inspection)	N/A
4.3.8	DEHP(DOP)	N/A
4.4	Electrical/Thermal Energy	N/A
4.5	Sound-Producting Toys	N/A
4.6	Small Objects	N/A
4.7	Accessible Edges	Р
4.8	Projections	N/A
4.8.1	Bath Toy Projections	N/A
4.9	Accessible Points	Р
4.10	Wires or Rods	N/A
4.11	Nails and Fasteners	N/A
4.12	Plastic Film	Р
4.13	Folding Mechanisms and Hinges	
4.13.1	Folding Mechanisms	N/A
4.13.2	Hinge-Line Clearance	N/A
4.14	Cords, Straps, and Elastics	
4.14.1	Cords, Straps, and Elastics in Toys	N/A
4.14.2	Self Retracting Pull Cords	N/A



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Section	Requirement	Result
4.14.3	Pull Toys	N/A
4.14.4	Strings and Lines for Flying Devices	N/A
4.14.5	Cords on Toy Bags Intended for Children Up to 18 Months	N/A
4.14.6	Ride-on toys	N/A
4.15	Stability and Over-Load Requirements	1
4.15.1	Stability of Ride-On Toys and Toy Seats	N/A
4.15.2	Sideways Stability Requirements	N/A
4.15.3	Fore and Aft Stability	N/A
4.15.4	Stability of Stationary Floor Toys	N/A
4.15.5	Overload Requirements for Ride-On Toys and Toy Seats	N/A
4.15.6	Wheeled Ride-On Toys	N/A
4.16	Confined Spaces	1
4.16.1	Ventilation	N/A
4.16.2	Closures	N/A
4.16.3	Toys that Enclose the Head	N/A
4.17	Wheels, Tires, and Axles	N/A
4.18	Holes, Clearance, and Accessibility of Mechanisms	•
4.18.1	Accessible Clearances for Moveable Segments	N/A
4.18.2	Circular Holes in Rigid Materials	N/A
4.18.3	Chains and Belts	N/A
4.18.4	Inaccessibility of Mechanisms	N/A
4.18.5	Winding Keys	N/A
4.18.6	Coil Springs	N/A
4.19	Simulated Protective Devices(such as helmets, hats, and goggles)	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	N/A



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Section	Requirement	Result
4.25.10	Battery-Power Ride-On Toys	N/A
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
4.28	Stroller and Carriage Toys	N/A
4.29	Art Materials (Label review only)	N/A
4.30	Toy Gun Marking	N/A
4.31	Balloons	N/A
4.32	Certain Toys with Nearly Spherical Ends	N/A
4.33	Marbles	N/A
4.34	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
4.41	Toy Chest	N/A
5	Labeling Requirements	,
5.2	Age Grading Labeling	N/A
5.3	Safety Labeling Requirements	N/A
5.4	Aquatic Toys	N/A
5.5	Crib and Playpen Toys	N/A
5.6	Mobiles	N/A
5.7	Stroller and Carriage Toys	N/A



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Section	Requirement	Result
5.8	Toys Intended to be Assembled By and Adult	N/A
5.9	Simulated Protective Devices	N/A
5.10	Toys with Functional Sharp Edges or Points	N/A
5.11	Small Objects, Small Balls, Marbles, and Balloons	N/A
5.12	Toy Caps	N/A
5.13	Art Materials	N/A
5.14	Electric Toys	N/A
5.15	Battery-Operated Toys	N/A
5.16	Promotional Materials	Р
5.17	Magnets	N/A
6	Instructional Literature	<u> </u>
6.1	Definition and Description	Р
6.2	Crib and Playpen Toys	N/A
6.3	Mobiles	N/A
6.4	Toys Intended to be Assembled By a 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
6.8	Toy chests	N/A
7	Producer's Markings	·
7.1	Producer's Markings	Р
7.2	Battery-Powered Ride-on Toys	N/A
7.3	Toy Chests	N/A
8	Test methods	•
8.5	Normal Use Testing	Р
8.7.1	Drop Test	N/A
8.7.2	Tip over Test for Large, Bulky Toys	N/A



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Section	Requirement	Result
8.7.3	Tumble Test for Wheeled Toys	N/A
8.7.4	Impact Test for Toys that Cover the Face	N/A
8.8	Torque Tests for Removal of Components	N/A
8.9	Tension Test for Removed of Components	N/A
8.9.1	Tension Test for Seams in Stuffed Toys and Beanbag Type Toys	N/A
8.10	Compression Test	N/A
8.11	Tests for Tire Removal and Snap-in Wheel and Axle Assembly Removal	N/A
8.12	Flexure Test	N/A
8.13	Test for Mouth-Actuated Toys	N/A

Note: P = Pass N/A = Not required, no applicable component



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ASTM F963-16 4.3.5.1(1), Total Lead Content in Paint and Similar Surface-coating Materials

Test method : CPSC-CH-E1003-09.1

The sample was digested with acid. Then the lead content was determined by Inductively Coupled Plasma Optical Emission Spectrometry (ICP-OES).

Limit : 90 mg/kg – according to ASTM F963-16 Standard Consumer Safety

Specification for Toy Safety.

Detection Limit : 10 mg/kg

Test No.	Material No.	Test result (mg/kg)
Pb-1	1a	N.D.

Note: -1 mg/kg = 1 ppm = 0.0001%

- N.D. = Not Detected

ASTM F963-16 4.3.5.2(2)(a), Total Lead Content in Accessible Component Parts

Test method : CPSC-CH-E1001-08.3; CPSC-CH-E1002-08.3

The sample was digested with acid. Then the lead content was determined by Inductively Coupled Plasma Optical Emission Spectrometry (ICP-OES).

Limit : 100 mg/kg – according to ASTM F963-16 Standard Consumer Safety

Specification for Toy Safety.

Detection Limit : 10 mg/kg

Test No.	Material No.	Test result (mg/kg)
Pb-2	3+4+5	N.D.
Pb-3	6+9	N.D.
Pb-4	7+8	N.D.
Pb-5	2	N.D.
Pb-6	1b	N.D.

Note: -1 mg/kg = 1 ppm = 0.0001%



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ASTM F963-16 4.3.5.1(2), Migration of Certain Elements in Paint and Similar Surfacecoating Materials

Test method : As per ASTM F963-16, soluble toxic element contents are determined by

Inductively Coupled Plasma Optical Emission Spectrometry (ICP-OES).

Detection limit : 2.5 mg/kg for each of the 8 soluble toxic elements

		Testing element							
		As	Ва	Cd	Cr	Hg	Pb	Sb	Se
Test No.	Material No.	Material No. Limit (mg/kg)							
		25	1000	75	60	60	90	60	500
		Test result (mg/kg)							
No.1	1a	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.

Note: -1 mg/kg = 1 ppm = 0.0001%

- N.D. = Not Detected

ASTM F963-16 4.3.5.2(2)(b), Migration of Certain Elements in Accessible Component Parts

Test method : As per ASTM F963-16, soluble toxic element contents are determined by

Inductively Coupled Plasma Optical Emission Spectrometry (ICP-OES).

Detection limit : 2.5 mg/kg for each of the 8 soluble toxic elements

				,	Testing	element			
		As	Ва	Cd	Cr	Hg	Pb	Sb	Se
Test No.	Material No.				Limit (mg/kg)			
		25	1000	75	60	60	90	60	500
		Test result (mg/kg)							
No.2	3	N.D.	5.0	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
No.3	4	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
No.4	5	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
No.5	6	N.D.	46	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
No.6	7	N.D.	50	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
No.7	8	N.D.	35	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
No.8	9	N.D.	2.5	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.

Note: -1 mg/kg = 1 ppm = 0.0001%



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Tracking Labels for Children's Products, CPSIA Section 103

Test Sample	Requirement	Result
ZENDO	Tracking Labels for Children's Products, CPSIA Section 103	Р

Note: P = Pass

Consumer Product Safety Commission 16 CFR CH. II

Physical and Mechanical Test

As specified in Title 16, Code of Federal Regulation, Chapter II – Consumer Pruducts Safety Commission of U.S.A.

-	16 CFR 1501 Small partsN/A
	As Specified in Title 16 Part 1501, Code of Federal Regulations, Chapter II – Consumer Products Safety Commission of U.S.A. Method for identifying toys and other articles intended for use by children under 3 years of age which present choking, aspiraton, or ingestion hazards because of small parts.
-	16 CFR 1500.48 Technical requirement for determining a sharp point Pass
	As Specified in Title 16 Part 1500.48, Code of Federal Regulations, Chapter II – Consumer Products Safety Commission of U.S.A.Technical requirement for determining a sharp point in toys and other articles intended for use by children under 8 years of age. (Only test the sample as received.)
-	16 CFR 1500.49 Technical requirement for determining a sharp metal or glass edge Pass
	As Specified in Title 16 Part 1500.49, Code of Federal Regulations, Chapter II – Consumer Products Safety Commission of U.S.A.Technical requirement for determining a sharp metal or glass edge in toys and other articles intended for use by children under 8 years of age. (Only test the sample as received.)

Note:

- N/A = Not Applicable
- As received evaluation only for above three physical tests.



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Flammability test

Flammability test on Solid

As Specified in Title 16 Part 1500.44 Code of Federal Regulation U.S.A.

Test Sample	Burning Rate (inch/sec)	Limit	Result
Pyramid	0.03	≤0.1 inch/sec	Pass
Wedge	0.02	≤0.1 inch/sec	Pass
Block	0.03	≤0.1 inch/sec	Pass
Card	0.04	≤0.1 inch/sec	Pass
Clip	0.02	≤0.1 inch/sec	Pass

Note:

- DNI= Did not ignited
- Only applicable clause(s) was/were shown

Total Lead Content (16 CFR 1303)

Test method : CPSC-CH-E1003-09.1

The sample was digested with acid. Then the lead content was determined by Inductively Coupled Plasma Optical Emission Spectrometry (ICP-OES).

Limit : 90 mg/kg - according to US 16 CFR Part 1303.

Detection limit : 10 mg/kg

Test No.	Material No.	Test result (mg/kg)
Pb-1	1a	N.D.

Note: -1 mg/kg = 1 ppm = 0.0001%



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Total Lead Content (CPSIA)

Test method : CPSC-CH-E1001-08.3; CPSC-CH-E1002-08.3; CPSC-CH-E1003-09.1

The sample was digested with acid. Then the lead content was determined by

Inductively Coupled Plasma Optical Emission Spectrometry (ICP-OES).

Limit For surface coating materials: 90 ppm

For non-surface coating (substrate): 100 ppm

- according to US Consumer Product Safety Improvement Act 2008 (CPSIA

Sec.101).

Detection limit 10 ppm

Test No.	Material No.	Test result (mg/kg)
Pb-1	1a	N.D.
Pb-2	3+4+5	N.D.
Pb-3	6+9	N.D.
Pb-4	7+8	N.D.
Pb-5	2	N.D.
Pb-6	1b	N.D.

Note: - 1 mg/kg = 1 ppm = 0.0001%



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Total Lead Content (California Proposition 65)

Test method : CPSC-CH-E1001-08.3; CPSC-CH-E1002-08.3; CPSC-CH-E1003-09.1

The sample was digested with acid. Then the lead content was determined by Inductively Coupled Plasma Optical Emission Spectrometry (ICP-OES).

Limit : a. PVC component: ≤ 200 ppm, and

b. Non-PVC component: ≤ 600 ppm, and

c. Baby bibs: \leq 200 ppm.

- according to California Proposition 65, Alameda Superior Court,

BG07350969 and RG08378050 / San Francisco Superior Court, 07-462991

Detection limit : 10 ppm

Test No.	Material No.	Test result (mg/kg)
Pb-1	1a	N.D.
Pb-2	3+4+5	N.D.
Pb-3	6+9	N.D.
Pb-4	7+8	N.D.
Pb-5	2	N.D.
Pb-6	1b	N.D.

Note: -1 mg/kg = 1 ppm = 0.0001%



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Phthalates(CPSIA)

Test method : CPSIA Sec.108, CPSC-CH-C1001-09.3.

Limit : 0.1% per substance - according to US Consumer Product Safety Improvement

Act 2008 (CPSIA).

Detection limit : 0.005% per substance

A: For toys and childcare articles:

Test No.			Phthalates-1	Phthalates-2	Phthalates-3
Material No.			1a	3+4+5	6+9
Parameter	CAS No.	Unit	Test result	Test result	Test result
Dibutylphthalate (DBP)	84-74-2	%	N.D.	N.D.	N.D.
Benzylbutylphthalate (BBP)	85-68-7	%	N.D.	N.D.	N.D.
Diethylhexylphthalate (DEHP)	117-81-7	%	N.D.	N.D.	N.D.

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

Test No.			Phthalates-1	Phthalates-2	Phthalates-3
Material No.			1a	3+4+5	6+9
Parameter	CAS No.	Unit	Test result	Test result	Test result
Di-n-octylphthalate (DNOP)	117-84-0	%	N.D.	N.D.	N.D.
Diisodecylphthalate (DIDP)	26761-40-0	%	N.D.	N.D.	N.D.
Diisononylphthalate (DINP)	28553-12-0	%	N.D.	N.D.	N.D.

A: For toys and childcare articles:

Test No.			Phthalates-4	Phthalates-5
Material No.			7+8	1b
Parameter	CAS No.	Unit	Test result	Test result
Dibutylphthalate (DBP)	84-74-2	%	N.D.	N.D.
Benzylbutylphthalate (BBP)	85-68-7	%	N.D.	N.D.
Diethylhexylphthalate (DEHP)	117-81-7	%	N.D.	N.D.

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

Test No.		Phthalates-4	Phthalates-5	
Material No.		7+8	1b	
Parameter	CAS No.	Unit	Test result	Test result
Di-n-octylphthalate (DNOP)	117-84-0	%	N.D.	N.D.
Diisodecylphthalate (DIDP)	26761-40-0	%	N.D.	N.D.
Diisononylphthalate (DINP)	28553-12-0	%	N.D.	N.D.

Note: - 1 mg/kg = 1 ppm = 0.0001%



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Phthalates (California Proposition 65)

Test method : CPSIA Sec.108, CPSC-CH-C1001-09.3.

Limit : 0.1% per substance - according to California Proposition 65, Sacramento

Superior Court, 07AS04683 / Alameda Superior Court, BG07350969,

RG08367601, RG07351032 and RG08378050.

Detection Limit : 0.005 % per substance

Test No.		Phthalates-1	Phthalates-2	Phthalates-3	
Material No.		1a	3+4+5	6+9	
Parameter	CAS No.	Unit	Test result	Test result	Test result
Dibutylphthalate (DBP)	84-74-2	%	N.D.	N.D.	N.D.
Benzylbutylphthalate (BBP)	85-68-7	%	N.D.	N.D.	N.D.
Diethylhexylphthalate (DEHP)	117-81-7	%	N.D.	N.D.	N.D.
Diisodecylphthalate (DIDP)	26761-40-0	%	N.D.	N.D.	N.D.
Di-n-hexyl phthalate (DnHP)	84-75-3	%	N.D.	N.D.	N.D.

Test No.			Phthalates-4	Phthalates-5		
Material No.			7+8	1b		
Parameter	CAS No.	Unit	Test result	Test result		
Dibutylphthalate (DBP)	84-74-2	%	N.D.	N.D.		
Benzylbutylphthalate (BBP)	85-68-7	%	N.D.	N.D.		
Diethylhexylphthalate (DEHP)	117-81-7	%	N.D.	N.D.		
Diisodecylphthalate (DIDP)	26761-40-0	%	N.D.	N.D.		
Di-n-hexyl phthalate (DnHP)	84-75-3	%	N.D.	N.D.		

Note: -1 mg/kg = 1 ppm = 0.0001%



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Packaging Waste (US)

Test method : Lead (Pb), Cadmium (Cd), Mercury (Hg), Chromium (Cr) - according to

EPA3050B: 1996 and EPA3052: 1996; determination with ICP-OES. Chromium (VI) Cr(VI) - according to EPA3060A: 1996; determination with

UV/VIS.

Limit : Total: 100 mg/kg – according to the United States Toxics in Packaging

Clearinghouse (TPCH) Model Toxics in Packaging Legislation in 1992, originally drafted by the Source Reduction Council of CONEG in 1989.

Detection limit : 10 mg/kg

Test No.	Material No.	Test result (mg/kg)				
		Pb	Cd	Cr(VI)	Hg	Total
PW-1	10	N.D.	N.D.	N.D.	N.D.	<100
PW-2	11	N.D.	N.D.	N.D.	N.D.	<100
PW-3	12	N.D.	N.D.	N.D.	N.D.	<100
PW-4	13	N.D.	N.D.	N.D.	N.D.	<100

Note: -1 mg/kg = 1 ppm = 0.0001%



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Other Information / Remark:

N/A



END OF THE REPORT