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TEST REPORT

<u>APPLICANT</u> : LOONEY LABS

ADDRESS : COLLEGE PARK, MD 20740

TESTED SAMPLE DESCRIPTION : NOMIDS, HOMEWORLDS, MARTIAN CHESS (RED),

ICE DUO, MARTIAN CHESS KS

TESTED ITEM NO. : N/A

COUNTRY OF ORIGIN : CHINA

COUNTRY OF DESTINATION : US, EU

AGE REQUESTED ON APPLICATION FORM : NOMIDS: 6-ADULT, OTHERS: 8-ADULT

LABELED AGE GRADE : NOMIDS: 6-ADULT, OTHERS: 8-ADULT

AGE GRADE APPLIED IN TESTING : OVER 6 YEARS

SAMPLE RECEIVED DATE : JUL. 20, 2020

TEST PERIOD : JUL. 21, 2020 TO JUL. 27, 2020

RESULT SUMMARY : PLEASE REFER TO NEXT PAGE(S).

SIGNED FOR AND ON BEHALF OF EUROFINS TESTING TECHNOLOGY (SHENZHEN) CO. LTD.

Jamie Zhang Toy Testing Assistant Manager Harry Chen
Lab & Technical Support
Manager

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Cocolun



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RESULT SUMMARY

TEST(S) REQUESTED BY APPLICANT:	RESULT
- EN 71 – 1: 2014 + A1: 2018 Mechanical and physical properties	PASS
- EN 71 – 2: 2011 + A1: 2014 Flammability	PASS
- EN 71 – 3: 2019 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 & 52 of Regulation (EC) No 552/2009 and Regulation (EU) 2018/2005 amending Annex XVII of REACH Regulation (EC) No 1907/2006.	PASS
- In accordance with ASTM F963-17 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, RG07356892	PASS
US 16 CFR Part 1307 for Prohibition of Children's Toys and Child Care Articles Containing Specified Phthalates.	PASS
- Phthalates according to US California Proposition 65 and Assembly Bill AB 1108.	PASS



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Material list

Item 1NomidsItem 2Homeworlds

Item 3 Martian Chess (red)

Item 4 Ice Duo

Item 5 Martian Chess KS

Testing material No.	Component	Material	Colour	Item No.
1a	Printing on box, game board and instruction	Printing	Multi-color	1-5
1b	Printing on game board	Printing	Black	1-5
1c	Instruction	Paper	White	1-5
1d	Game board	Paper/glue	White and grey/transparent	1-5
2	Surface of box	Paper/glue	White/transparent	1-5
3	Seam of box (Adhesive tape)	Plastic/glue	Transparent	1-5
4	Chess	Plastic	Transparent red	1/2/4
5	Chess	Plastic	Transparent dark blue	1/2/4
6	Chess	Plastic	Transparent blue	1
7	Chess	Plastic	Transparent green	1/2/4
8	Chess	Plastic	Transparent yellow	1/2/4
9	Chess	Plastic	White	1
10	Chess	Plastic	Transparent	1
11	Chess	Plastic	Black	1
12	Chess	Plastic	Transparent purple	1/4
13	Chess	Plastic	Transparent orange	1
14	Chess	Plastic	Red	3
15	Chess	Plastic	Grey	5
16	Dice	Plastic	Black	1
17	Dice	Plastic	White	4
18	Coating on dice	Coating	White	1
19	Coating on dice	Coating	Black	4
20	Coating on dice	Coating	Purple	4
21	Coating on dice	Coating	Red	4
22	Coating on dice	Coating	Light blue	4
23	Coating on dice	Coating	Orange yellow	4
24	Coating on dice	Coating	Green	4
25	Token	Plastic/paper/printing	Transparent/white and grey/multi-color	2
26	Staple of instruction	Metal	Silvery	2
27	Coating on chess	Coating	Silvery	5



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EN 71 - 1: 2014 + A1: 2018 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	Parts moving against each other	
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	Enclosures	
4.14.1	Toys which a child can enter	N/A
4.14.2	Masks and helmets	N/A



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Clause	Requirement	Result
4.15	Toys intended to bear the mass of a child	
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
4.16	Heavy immobile toys	N/A
4.17	Projectiles toys	
4.17.1	General	N/A
4.17.2	All projectiles	N/A
4.17.3	Projectile toys with stored energy	N/A
4.17.4	Certain projectile toys without stored energy	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	Magnets	
4.23.1	General	N/A
4.23.2	Toys other than magnetic/electrical experimental sets intended for children over 8 years	N/A
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



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Clause	Requirement	Result
4.26	Toy Disguise Costumes	N/A
4.27	Flying toys	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
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
5.15	Sledges with cords for pulling	N/A
6	Packaging	Р



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Clause	Requirement	Result
7	Warnings, markings and instructions for use (Note: It is drawn to your attention that the warnings, precautions and i for use should be given in the national language(s) of the country wher 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
7.6	Hazardous sharp functional edges and points	N/A
7.7	Projectiles toys	N/A
7.8	Imitation protective masks and helmets	N/A
7.9	Toy kites	N/A
7.10	Roller skates, inline skates, skateboards and certain other ride-on toys	
7.10.1	Roller skates, inline skates and skateboards	N/A
7.10.2	Ride-on toys without a braking device	N/A
7.10.3	Electrically-driven ride-on toys	N/A
7.10.4	Instructions for use	N/A
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



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Clause	Requirement	Result
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
7.23	Toys intended to be attached to a cradle, cot or perambulator	N/A
7.24	Sledges with cords for pulling	N/A
7.25	Flying toys	
7.25.1	Flying toys	N/A
7.25.2	Remote controlled flying toys	N/A
7.26	Improvised projectiles	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
,	Importer's name and address	Packaging	Present
2	Manufacturer's name and address	Packaging	Present
3	Product identification	Packaging	Present
4	Washing/Cleaning instruction	1	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: 2019 - Migration of Certain Elements

Test method : With reference to EN 71 – 3: 2019: 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.

Element	Limit(mg/kg)	MDL		Material T	est Resu	lt (mg/kg)	
Element	Category III	(mg/kg)	4	5	6	7	8
Soluble Aluminium (AI)	70000(28130#)	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.	N.D.	N.D.	N.D.	N.D.
Soluble Boron (B)	15000	10	N.D.	N.D.	N.D.	N.D.	N.D.
Soluble Cadmium (Cd)	17	8	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)	0.053	0.025	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)	23	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.	N.D.	N.D.	N.D.	N.D.

Element	Limit(mg/kg)	MDL		Material T	est Resu	lt (mg/kg)	
Element	Category III	(mg/kg)	9	10	11	12	13
Soluble Aluminium (AI)	70000(28130#)	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.	N.D.	N.D.	N.D.	N.D.
Soluble Boron (B)	15000	10	N.D.	N.D.	N.D.	N.D.	N.D.
Soluble Cadmium (Cd)	17	8	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)	0.053	0.025	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)	23	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.	N.D.	N.D.	N.D.	N.D.



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	Limit(mg/kg)	MDL		Material T	est Resul	t (mg/kg)	
Element	Category III	(mg/kg)	14	15	16	17	18 (*1) (12.4mg)
Soluble Aluminium (AI)	70000(28130#)	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.	N.D.	N.D.	N.D.	N.D.
Soluble Boron (B)	15000	10	N.D.	N.D.	N.D.	N.D.	N.D.
Soluble Cadmium (Cd)	17	8	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)	0.053	0.025	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)	23	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.	N.D.	21	N.D.	16

Floment	Element Limit(mg/kg)		Material Test Result (mg/kg)				
Element	Category III	(mg/kg)	19 (*2)	20 (*2)	21 (*2)	22 (*2)	23 (*2)
Soluble Aluminium (AI)	70000(28130#)	10	ı	-	-	-	-
Soluble Antimony (Sb)	560	10	-	-	-	-	-
Soluble Arsenic (As)	47	10	ı	-	-	-	-
Soluble Barium (Ba)	18750	10	ı	-	-	-	-
Soluble Boron (B)	15000	10	ı	-	-	-	-
Soluble Cadmium (Cd)	17	8	ı	-	-	-	-
Soluble Chromium III (Cr III)	460	5	ı	-	-	-	-
Soluble Chromium VI (Cr VI)	0.053	0.025	ı	-	-	-	-
Soluble Cobalt (Co)	130	10	ı	-	-	-	-
Soluble Copper(Cu)	7700	10	-	-	-	-	-
Soluble Lead (Pb)	23	10	-	-	-	-	-
Soluble Manganese (Mn)	15000	10	ı	-	-	-	-
Soluble Mercury (Hg)	94	10	ı	-	-	-	-
Soluble Nickel (Ni)	930	10	ı	-	-	-	-
Soluble Selenium (Se)	460	10	-	-	-	-	-
Soluble Strontium (Sr)	56000	10	-	-	-	-	-
Soluble Tin (Sn)	180000	4.9	-	-	-	-	-
Soluble Organic Tin	12	0.1	-	-	-	-	-
Soluble Zinc (Zn)	46000	10	-	-	-	-	-



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Element	Limit(mg/kg)	MDL	Ma	terial Test F	Result (mg/k	(g)
Element	Category III	(mg/kg)	24 (*2)	25	1(a+c)	1(a+b+d)
Soluble Aluminium (AI)	70000(28130#)	10	-	240	N.D.	N.D.
Soluble Antimony (Sb)	560	10	ı	N.D.	N.D.	N.D.
Soluble Arsenic (As)	47	10	-	N.D.	N.D.	N.D.
Soluble Barium (Ba)	18750	10	=	N.D.	N.D.	N.D.
Soluble Boron (B)	15000	10	=	N.D.	N.D.	N.D.
Soluble Cadmium (Cd)	17	8	=	N.D.	N.D.	N.D.
Soluble Chromium III (Cr III)	460	5	=	N.D.△	N.D.△	N.D.△
Soluble Chromium VI (Cr VI)	0.053	0.025	=	N.D.△	N.D.△	N.D.△
Soluble Cobalt (Co)	130	10	=	N.D.	N.D.	N.D.
Soluble Copper(Cu)	7700	10	=	N.D.	N.D.	N.D.
Soluble Lead (Pb)	23	10	=	N.D.	N.D.	N.D.
Soluble Manganese (Mn)	15000	10	ı	11	N.D.	N.D.
Soluble Mercury (Hg)	94	10	-	N.D.	N.D.	N.D.
Soluble Nickel (Ni)	930	10	ı	N.D.	N.D.	N.D.
Soluble Selenium (Se)	460	10	-	N.D.	N.D.	N.D.
Soluble Strontium (Sr)	56000	10	=	14	16	15
Soluble Tin (Sn)	180000	4.9	-	N.D.	N.D.	N.D.
Soluble Organic Tin	12	0.1	-	^	^	^
Soluble Zinc (Zn)	46000	10	-	N.D.	N.D.	N.D.

Element	Limit(mg/kg) Category III	MDL (mg/kg)	Material Test Result (mg/kg) 27
Soluble Aluminium (AI)	70000(28130 [#])	(mg/kg) 10	4.73×10 ⁴
Soluble Antimony (Sb)	560	10	N.D.
Soluble Arsenic (As)	47	10	N.D.
Soluble Barium (Ba)	18750	10	N.D.
Soluble Boron (B)	15000	10	N.D.
Soluble Cadmium (Cd)	17	8	N.D.
Soluble Chromium III (Cr III)	460	5	N.D.△
Soluble Chromium VI (Cr VI)	0.053	0.025	N.D.△
Soluble Cobalt (Co)	130	10	N.D.
Soluble Copper(Cu)	7700	10	N.D.
Soluble Lead (Pb)	23	10	N.D.
Soluble Manganese (Mn)	15000	10	N.D.
Soluble Mercury (Hg)	94	10	N.D.
Soluble Nickel (Ni)	930	10	N.D.
Soluble Selenium (Se)	460	10	N.D.
Soluble Strontium (Sr)	56000	10	N.D.
Soluble Tin (Sn)	180000	4.9	N.D.
Soluble Organic Tin	12	0.1	- ^
Soluble Zinc (Zn)	46000	10	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 Methyltin, Butyltin, Dibutyltin, Tributyltin, Tetrabutyltin, Monooctyltin, Dioctyltin, Dipropyltin, Diphenyltin, Triphenyltin and Dimethyltin.
- Chromium (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 EN 71 3: 2019.
- -# Proposal of stricter migration limit for Aluminium (AI) according to the Commission Directive (EU) 2019/1922, which is expected to enter into force from 20 May 2021.

Remark:

- *1. The weight of sample marked (*1) available was less than 100mg, but greater than 10mg, so result was calculated as if 100mg of the sample was available.
- *2. The weight of sample marked (*2) available was less than 10mg, so the test for soluble heavy metal content was not performed.



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Total Cadmium Content

Test method : For plastic material : EN 1122: 2001, Method B;

For paint or surface coating material: EPA 3051A: 2007, EPA 6010D: 2018.

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+1b+18	N.D.
Cd-2	19+20+21	N.D.
Cd-3	22+23+24	N.D.
Cd-4	1d+2+3	N.D.
Cd-5	4+5+6	N.D.
Cd-6	7+8+9	N.D.
Cd-7	10+11+12	N.D.
Cd-8	13+14+15	N.D.
Cd-9	16+17+25	N.D.
Cd-10	27	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 & 52 of Regulation (EC) No 552/2009 and

Regulation (EU) 2018/2005 amending Annex XVII of REACH Regulation (EC)

No 1907/2006.

Detection limit : 0.005% per substance

A: For toys and childcare articles:

Test No.			Phthalates-1	Phthalates-2	Phthalates-3
Material No.			1a+1b+18	19+20+21	22+23+24
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	%	0.006	N.D.	N.D.
Diisobutyl phthalate (DiBP)	84-69-5	%	N.D.	N.D.	N.D.
Sum (DBP + BBP + DEHP + DiBP)		%	0.006	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+1b+18	19+20+21	22+23+24
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	Phthalates-6
Material No.			4+5+6	7+8+9	10+11+12
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.
Diisobutyl phthalate (DiBP)	84-69-5	%	N.D.	N.D.	N.D.
Sum (DBP + BBP + DEHP + DiBP)		%	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-4	Phthalates-5	Phthalates-6
Material No.			4+5+6	7+8+9	10+11+12
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

A: For toys and childcare articles:

Test No.			Phthalates-7	Phthalates-8	Phthalates-9
Material No.			13+14+15	16+17+25	1d
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.
Diisobutyl phthalate (DiBP)	84-69-5	%	N.D.	N.D.	N.D.
Sum (DBP + BBP + DEHP + DiBP)		%	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-7	Phthalates-8	Phthalates-9
Material No.			13+14+15	16+17+25	1d
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-10
Material No.			27
Parameter	CAS No.	Unit	Test result
Dibutylphthalate (DBP)	84-74-2	%	N.D.
Benzylbutylphthalate (BBP)	85-68-7	%	N.D.
Diethylhexylphthalate (DEHP)	117-81-7	%	N.D.
Diisobutyl phthalate (DiBP)	84-69-5	%	N.D.
Sum (DBP + BBP + DEHP + DiBP)		%	N.D.
Limit (sum)		%	0.1

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

Test No.			Phthalates-10
Material No.			27
Parameter	CAS No.	Unit	Test result
Di-n-octylphthalate (DNOP)	117-84-0	%	N.D.
Diisodecylphthalate (DIDP)	26761-40-0	%	N.D.
Diisononylphthalate (DINP)	28553-12-0	%	N.D.
Sum (DNOP+ DIDP+ DINP)		%	N.D.
Limit (sum)		%	0.1

A: For toys and childcare articles:

Test No.			Phthalates-11
Material No.			2+3
Parameter	CAS No.	Unit	Test result
Dibutylphthalate (DBP)	84-74-2	%	N.D.
Benzylbutylphthalate (BBP)	85-68-7	%	N.D.
Diethylhexylphthalate (DEHP)	117-81-7	%	N.D.
Diisobutyl phthalate (DiBP)	84-69-5	%	N.D.
Sum (DBP + BBP + DEHP + DiBP)		%	N.D.
Limit (sum)		%	0.1

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



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ASTM F963-17, Standard Consumer Safety Specification for Toy Safety

Section	Requirement	Result
4	Safety Requirements	1
4.1	Material Quality	Р
4.2	Flammability	Р
4.3.7	Stuffing Materials(Visual Inspection)	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	<u>.</u>
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
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	
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



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Section	Requirement	Result
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	•
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
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



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Section	Requirement	Result
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	Р
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
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

TO BE CONTINUED



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Section	Requirement	Result
5.15	Battery-Operated Toys	N/A
5.16	Promotional Materials	Р
5.17	Magnets	N/A
6	Instructional Literature	•
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	Р
8.7.2	Tip over Test for Large, Bulky Toys	N/A
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	Р
8.9	Tension Test for Removed of Components	Р
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 F963-17 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 F963-17 Standard Consumer Safety

Specification for Toy Safety.

Detection Limit : 10 mg/kg

Test No.	Material No.	Test result (mg/kg)
Pb-1	1a+1b+18	N.D.
Pb-2	19+20+21	N.D.
Pb-3	22+23+24	N.D.
Pb-4	27	N.D.

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

- N.D. = Not Detected

ASTM F963-17 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 F963-17 Standard Consumer Safety

Specification for Toy Safety.

Detection Limit : 10 mg/kg

Test No.	Material No.	Test result (mg/kg)
Pb-5	1d+2+3	N.D.
Pb-6	4+5+6	N.D.
Pb-7	7+8+9	N.D.
Pb-8	10+11+12	N.D.
Pb-9	13+14+15	N.D.
Pb-10	16+17+25	N.D.
Pb-11	26	N.D.

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



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ASTM F963-17 4.3.5.1(2), Migration of Certain Elements in Paint and Similar Surfacecoating Materials

Test method : As per ASTM F963-17, soluble toxic element contents are determined by

Inductively Coupled Plasma Mass Spectrometry (ICP-MS)

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		
				T	est resu	It (mg/k	g)				
1	18(12.4mg)(*3)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.		
2	19(*4)	-	-	-	-	-	-	-	-		
3	20(*4)	-	-	-	-	-	-	-	-		
4	21(*4)	-	-	-	-	-	-	-	-		
5	22(*4)	-	-	-	-	-	-	-	-		
6	23(*4)	-	-	-	-	-	-	-	-		
7	24(*4)	-	-	-	-	-	-	-	-		
8	1a	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.		
9	1b(49.7mg)(*3)	N.D.	21	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.		
10	27	N.D.	6.5	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.		

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

- N.D. = Not Detected

Remark:

- *3. The weight of sample marked (*3) available was less than 100mg, but greater than 10mg, so result was calculated as if 100mg of the sample was available.
- *4. The weight of sample marked (*4) available was less than 10mg, so the test for soluble heavy metal content was not performed.



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ASTM F963-17 4.3.5.2(2)(b), Migration of Certain Elements in Accessible Component Parts

Test method : As per ASTM F963-17, soluble toxic element contents are determined by

Inductively Coupled Plasma Mass Spectrometry (ICP-MS).

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)								
11	4	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.		
12	5	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.		
13	6	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.		
14	7	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.		
15	8	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.		
16	9	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.		
17	10	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.		
18	11	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.		
19	12	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.		
20	13	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.		
21	14	N.D.	9.0	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.		
22	15	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.		
23	16	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.		
24	17	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.		
25	25	N.D.	4.5	N.D.	3.0	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
NOMIDS, HOMEWORLDS, MARTIAN CHESS (RED), ICE DUO, MARTIAN CHESS KS	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.

	T
-	16 CFR 1501 Small parts
	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.
-	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.

Note: - N/A = Not Applicable



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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
Board (Nomids)	DNI	≤0.1 inch/sec	Pass
Pyramids (Nomids)	0.01	≤0.1 inch/sec	Pass
Dice (Nomids)	0.02	≤0.1 inch/sec	Pass
Board(Homeworlds)	DNI	≤0.1 inch/sec	Pass
Pyramids(Homeworlds)	0.01	≤0.1 inch/sec	Pass
Board (Martian Chess (red))	DNI	≤0.1 inch/sec	Pass
Pyramids (Martian Chess (red))	0.01	≤0.1 inch/sec	Pass
Board(Ice Duo)	DNI	≤0.1 inch/sec	Pass
Dice(Ice Duo)	0.02	≤0.1 inch/sec	Pass
Pyramids(Ice Duo)	0.01	≤0.1 inch/sec	Pass
Card (Ice Duo)	DNI	≤0.1 inch/sec	Pass
Board(Martian Chess KS)	DNI	≤0.1 inch/sec	Pass
Pyramids (Martian Chess KS)	0.01	≤0.1 inch/sec	Pass

Note:

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



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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+1b+18	N.D.
Pb-2	19+20+21	N.D.
Pb-3	22+23+24	N.D.
Pb-4	27	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 (ppm)
Pb-1	1a+1b+18	N.D.
Pb-2	19+20+21	N.D.
Pb-3	22+23+24	N.D.
Pb-4	27	N.D.
Pb-5	1d+2+3	N.D.
Pb-6	4+5+6	N.D.
Pb-7	7+8+9	N.D.
Pb-8	10+11+12	N.D.
Pb-9	13+14+15	N.D.
Pb-10	16+17+25	N.D.
Pb-11	26	N.D.

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



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Total Lead Content (California Proposition 65)

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

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

Limit Accessible surface coating ≤ 90 ppm

Accessible substrate ≤ 100 ppm

- according to California Proposition 65, Alameda Superior Court,

RG07356892

Detection limit 10 ppm

Test No.	Material No.	Test result (ppm)
Pb-1	1a+1b+18	N.D.
Pb-2	19+20+21	N.D.
Pb-3	22+23+24	N.D.
Pb-4	27	N.D.
Pb-5	1d+2+3	N.D.
Pb-6	4+5+6	N.D.
Pb-7	7+8+9	N.D.
Pb-8	10+11+12	N.D.
Pb-9	13+14+15	N.D.
Pb-10	16+17+25	N.D.
Pb-11	26	N.D.

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



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Phthalates (16 CFR Part 1307)

Test method : CPSC-CH-C1001-09.4.

Limit : 0.1% per substance - according to US 16 CFR Part 1307 Prohibition of

Children's Toys and Child Care Articles Containing Specified Phthalates

Detection limit : 0.005% per substance

Test No.			Phthalates-1	Phthalates-2	Phthalates-3
Material No.			1a+1b+18	19+20+21	22+23+24
Parameter	CAS No.	Unit	Test result	Test result	Test result
Diethylhexylphthalate (DEHP)	117-81-7	%	0.006	N.D.	N.D.
Dibutylphthalate (DBP)	84-74-2	%	N.D.	N.D.	N.D.
Benzylbutylphthalate (BBP)	85-68-7	%	N.D.	N.D.	N.D.
Diisononylphthalate (DINP)	28553-12-0	%	N.D.	N.D.	N.D.
Diisobutyl phthalate (DiBP)	84-69-5	%	N.D.	N.D.	N.D.
Di-n-pentyl phthalate (DPENP)	131-18-0	%	N.D.	N.D.	N.D.
Di-n-hexyl phthalate (DHEXP)	84-75-3	%	N.D.	N.D.	N.D.
Dicyclohexyl phthalate(DCHP)	84-61-7	%	N.D.	N.D.	N.D.

Test No.			Phthalates-4	Phthalates-5	Phthalates-6
Material No.			4+5+6	7+8+9	10+11+12
Parameter	CAS No.	Unit	Test result	Test result	Test result
Diethylhexylphthalate (DEHP)	117-81-7	%	N.D.	N.D.	N.D.
Dibutylphthalate (DBP)	84-74-2	%	N.D.	N.D.	N.D.
Benzylbutylphthalate (BBP)	85-68-7	%	N.D.	N.D.	N.D.
Diisononylphthalate (DINP)	28553-12-0	%	N.D.	N.D.	N.D.
Diisobutyl phthalate (DiBP)	84-69-5	%	N.D.	N.D.	N.D.
Di-n-pentyl phthalate (DPENP)	131-18-0	%	N.D.	N.D.	N.D.
Di-n-hexyl phthalate (DHEXP)	84-75-3	%	N.D.	N.D.	N.D.
Dicyclohexyl phthalate(DCHP)	84-61-7	%	N.D.	N.D.	N.D.

Test No.			Phthalates-7	Phthalates-8	Phthalates-9
Material No.			13+14+15	16+17+25	1d
Parameter	CAS No.	Unit	Test result	Test result	Test result
Diethylhexylphthalate (DEHP)	117-81-7	%	N.D.	N.D.	N.D.
Dibutylphthalate (DBP)	84-74-2	%	N.D.	N.D.	N.D.
Benzylbutylphthalate (BBP)	85-68-7	%	N.D.	N.D.	N.D.
Diisononylphthalate (DINP)	28553-12-0	%	N.D.	N.D.	N.D.
Diisobutyl phthalate (DiBP)	84-69-5	%	N.D.	N.D.	N.D.
Di-n-pentyl phthalate (DPENP)	131-18-0	%	N.D.	N.D.	N.D.
Di-n-hexyl phthalate (DHEXP)	84-75-3	%	N.D.	N.D.	N.D.
Dicyclohexyl phthalate(DCHP)	84-61-7	%	N.D.	N.D.	N.D.



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Test No.			Phthalates-10	Phthalates-11
Material No.			27	2+3
Parameter	CAS No.	Unit	Test result	Test result
Diethylhexylphthalate (DEHP)	117-81-7	%	N.D.	N.D.
Dibutylphthalate (DBP)	84-74-2	%	N.D.	N.D.
Benzylbutylphthalate (BBP)	85-68-7	%	N.D.	N.D.
Diisononylphthalate (DINP)	28553-12-0	%	N.D.	N.D.
Diisobutyl phthalate (DiBP)	84-69-5	%	N.D.	N.D.
Di-n-pentyl phthalate (DPENP)	131-18-0	%	N.D.	N.D.
Di-n-hexyl phthalate (DHEXP)	84-75-3	%	N.D.	N.D.
Dicyclohexyl phthalate(DCHP)	84-61-7	%	N.D.	N.D.

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



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Phthalates (California Proposition 65)

Test method : CPSC-CH-C1001-09.4.

Limit : See below - US California Proposition 65 and Assembly Bill AB 1108.

Detection Limit : 0.005 % per substance

Test No.			Phthalates-1	Phthalates-2	Phthalates-3
Material No.			1a+1b+18	19+20+21	22+23+24
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	%	0.006	N.D.	N.D.
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.
Di-n-hexyl phthalate (DnHP)	84-75-3	%	N.D.	N.D.	N.D.

Test No.			Phthalates-4	Phthalates-5	Phthalates-6
Material No.			4+5+6	7+8+9	10+11+12
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.
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.
Di-n-hexyl phthalate (DnHP)	84-75-3	%	N.D.	N.D.	N.D.

Test No.			Phthalates-7	Phthalates-8	Phthalates-9
Material No.		13+14+15	16+17+25	1d	
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.
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.
Di-n-hexyl phthalate (DnHP)	84-75-3	%	N.D.	N.D.	N.D.

Test No.			Phthalates-10	Phthalates-11
Material No.			27	2+3
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.
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.
Di-n-hexyl phthalate (DnHP)	84-75-3	%	N.D.	N.D.



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Requirements:

Ordinance	Parameter	Maximum Allowable Limit
Proposition 65	Dibutylphthalate (DBP)	0.1%
	Benzylbutylphthalate (BBP)	0.1%
	Diethylhexylphthalate (DEHP)	0.1%
	Diisodecylphthalate (DIDP)	0.1%
	Di-n-hexyl phthalate (DnHP)	0.1%
	Diisononylphthalate (DINP)	0.1%

Ordinance	Parameter	Maximum Allowable Limit
Assembly Bill No. 1108	For toys and Childcare articles:	
Chapter 672	Dibutylphthalate (DBP)	0.1%
	Benzylbutylphthalate (BBP)	0.1%
	Diethylhexylphthalate (DEHP)	0.1%
	For toys and Childcare articles intended for use by a child under three years	
	of age if that product can be placed in the child's mouth:	
	Di-n-octylphthalate (DNOP)	0.1%
	Diisodecylphthalate (DIDP)	0.1%
	Diisononylphthalate (DINP)	0.1%

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

- N.D. = Not Detected

Other Information / Remark:

N/A



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END OF THE REPORT