

# TEST REPORT

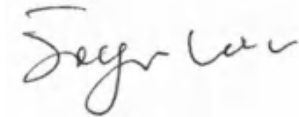
<b><u>APPLICANT</u></b>	: Adena International Trading LLC
<b><u>ADDRESS</u></b>	: 1376 Holly Ave. Columbus, OH 43212
<b><u>SAMPLE DESCRIPTION</u></b>	: Montessori Materials Number Rods /Constructive Triangles with 3 Boxes/Ten and Teen Boards/Hundred Board/Pythagoras Board/Addition Strip Board & Tables/Division Bead Board Math Materials/Large Bead Frame Montessori Educational Materials/Checker Board Beads Montessori Educational Materials Learning Tools Preschool at-Home Math Toys/Montessori Materials - Stamp Game/Lowercase Small Movable Alphabet/Sand Tray- Montessori Educational Materials Learning Tools Preschool Toys/Pitch Clock
<b><u>ITEM NO.</u></b>	: B072XDJBJ1 /B075D327ZH /B0757NJ4ZZ /B0757TNDVR /B0757WYC2B /B07585N8C9 /B0777JQ1SN /B0871XSVYN /B0871HPBK2 /B0757NJ668 /B075P6W9VQ /B087J9D6HB /B074TDHTYY
<b><u>MANUFACTURER</u></b>	: Yunhe Xinqiao toys factory
<b><u>BUYER</u></b>	: Adena International Trading LLC
<b><u>COUNTRY OF ORIGIN</u></b>	: China
<b><u>AGE REQUESTED ON APPLICATION FORM</u></b>	: 3+
<b><u>LABELED AGE GRADE</u></b>	: Not for children under 3 yrs
<b><u>AGE GRADE APPLIED IN TESTING</u></b>	: Over 3 Years
<b><u>SAMPLE RECEIVED DATE</u></b>	: 10-Oct-2020
<b><u>SAMPLE RESUBMISSION DATE</u></b>	: 19-Oct-2020
<b><u>TURN AROUND TIME</u></b>	: 10-Oct-2020 to 20-Oct-2020

The following test item(s) was/were performed on submitted sample(s) and/or component(s) confirmed by applicant

TEST REQUESTED	TEST METHOD/REGULATION	RESULT
Mechanical and Physical Properties	ASTM F963-17	Pass
Flammability of Toys	ASTM F963-17	Pass
Heavy Metals	ASTM F963-17	Pass
Total Lead Content in Paint / Surface Coating	US CPSIA, Section 101	Pass
Total Lead Content in Substrate	US CPSIA, Section 101	Pass
Phthalates Content	US CPSIA, Section 108	Pass

\*\*\*\*\* FOR FURTHER DETAILS, PLEASE REFER TO THE FOLLOWING PAGE(S) \*\*\*\*\*

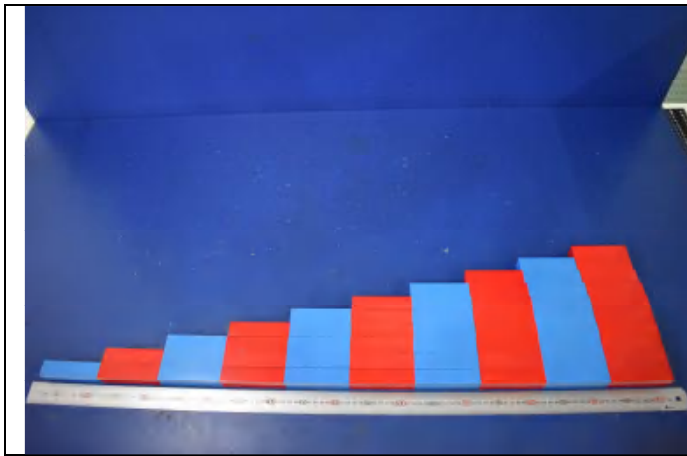
Signed for and on behalf of  
Eurofins Product Testing Service (Shanghai) Co., Ltd



Joyce Liu  
Lab Manager

*Samples are obtained by express delivery, Results obtained refer only to samples, products or material received in Laboratory, as described in point related to sample description, and tested in conditions shown in present report. Eurofins Product Testing Service (Shanghai) Co., Ltd ensures that this job has been performed according to our Quality System and complying contract and legal conditions. If you happen to have any comments, please do it by sending email to [info.sh@eurofins.com](mailto:info.sh@eurofins.com) and referring to this report number. Reproduction of this document is only valid if it is done completely and under the written permission of Eurofins Product Testing Service (Shanghai) Co., Ltd. If you happen to have any complaints, please do it by sending email to [chinacomplaint@eurofins.com](mailto:chinacomplaint@eurofins.com) and referring to this report number.*

**SAMPLE PHOTO(S)**



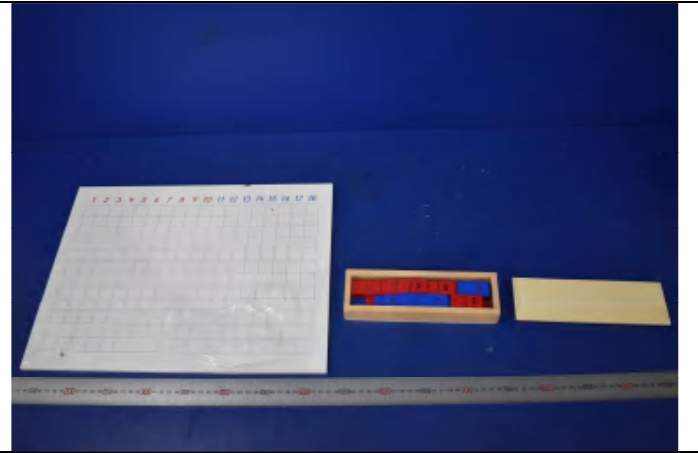
**A**



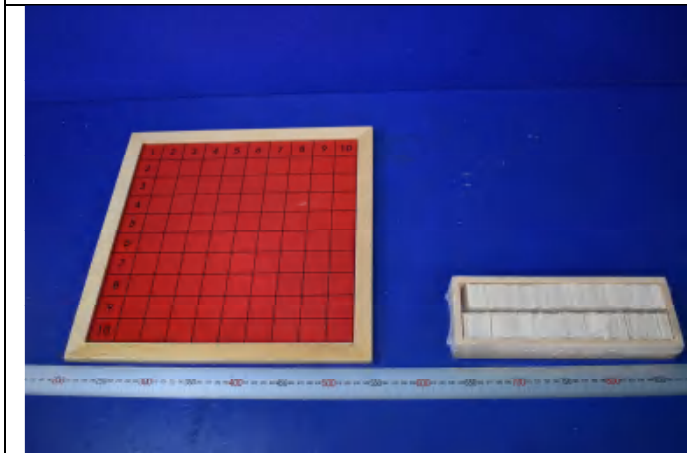
**B**



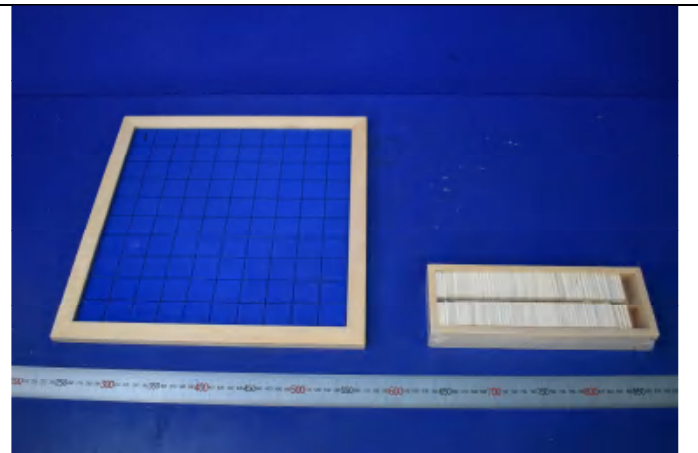
**C**



**D**



**E**

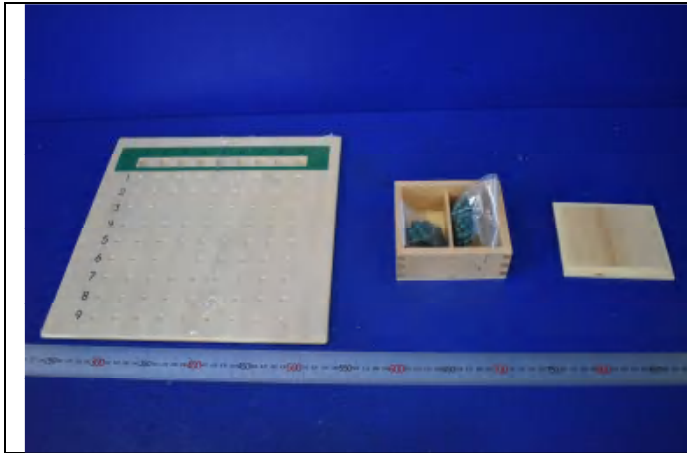


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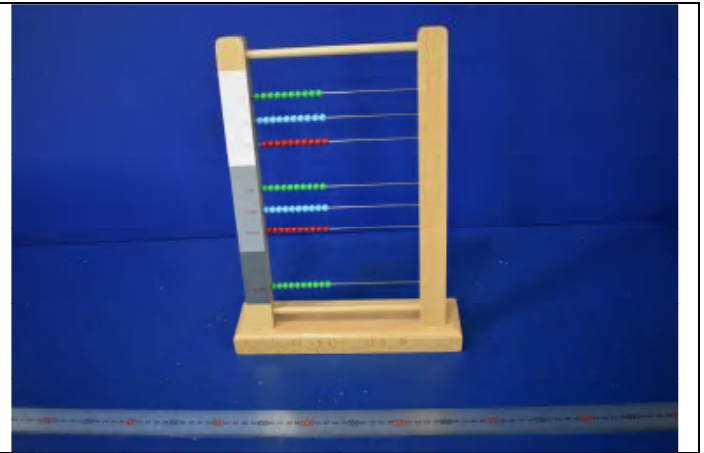
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\*\*\*TO BE CONTINUED\*\*\*

**SAMPLE PHOTO(S)**



**G**



**H**



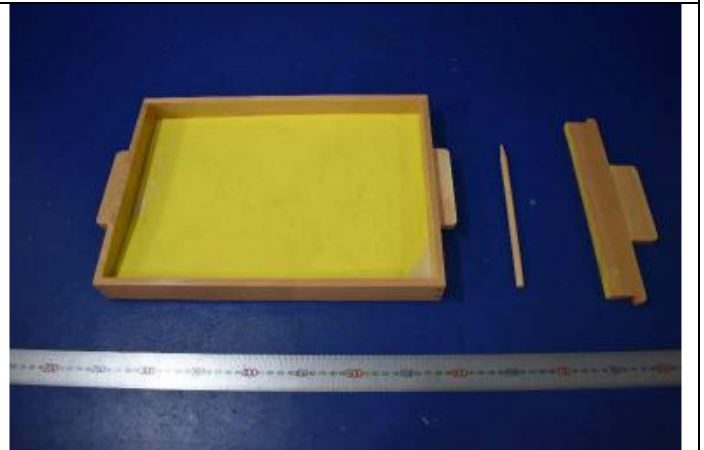
**I**



**J**



**K**

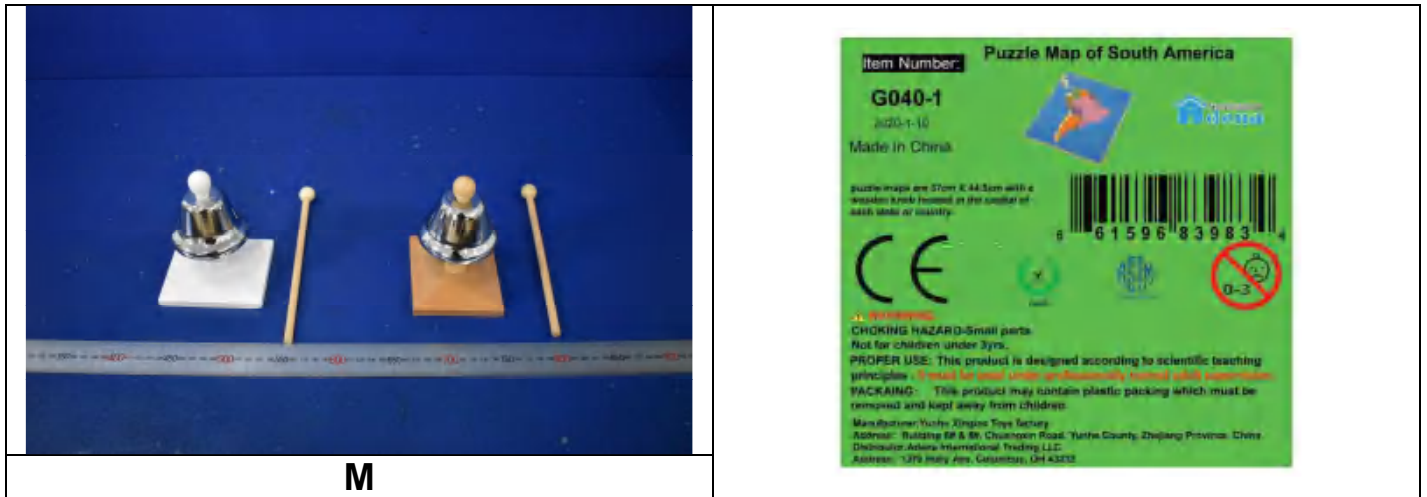


**L**

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\*\*\*TO BE CONTINUED\*\*\*

**SMPLE PHOTO(S)**



M

**EFSH20100130-CG-02**

\*\*\*TO BE CONTINUED\*\*\*

## COMPONENT LIST

Component No.	Component	Sample No.
1	Transparent coating on wood	B C D E F G H I J K L M
2	Red coating on wood	D E H K
3	Black coating on wood	B C E F G
4	Dark blue coating on wood	D F K
5	Blue coating on wood	J
6	White coating on wood	E H J M
7	Green coating on wood	J
8	Watermelon red coating on wood	A B J
9	Blue coating on wood	A
10	Dark green coating on wood	G
11	Green coating on wood	G
12	Green coating on wood	B
13	Grey coating on wood	B
14	Yellow coating on wood	B
15	Grey coating on wood	H
16	Dark grey coating on wood	H
17	Red plastic bead	H I
18	Green plastic bead	H I
19	Pink plastic bead	I
20	White plastic bead	I
21	Blue plastic bead	H I
22	Purple plastic bead	I
23	Brown plastic bead	I
24	Yellow plastic bead	I
25	Dark blue plastic bead	I
26	Natural color plywood excluding coating	B C D E F G I J K L
27	Natural color wood excluding coating	B C D E F G H I J K L M
28	Brown MDF wood excluding coating	A B D E F
29	Yellow sand	L
30	Bronze plated metal	I
31	Silver plated metal	M
32	Silver metal	H

\*\*\*TO BE CONTINUED\*\*\*



## TEST RESULT

### Mechanical and Physical Properties

Test Request: As specified in Consumer Safety Specification ASTM F963-17

Section	Description	Result
4.1	Material Quality	P
4.3.7	Stuffing Materials	N/A
4.5	Sound-Producing Toys	N/A
4.6	Small Objects	P
4.6.1	Toys that are intended for children under 36 months of age	N/A
4.6.2	Mouth-Actuated Toys	N/A
4.6.3	Toys that are intended for children over 36 months but less than 72 months	P
4.7	Accessible Edges	P
4.8	Projections	P
4.8.1	Bath Toy Projections	N/A
4.9	Accessible Points	P
4.10	Wires or Rods	N/A
4.11	Nails and Fasteners	N/A
4.12	Plastic Film	N/A
4.13	Folding Mechanisms and Hinges	N/A
4.14	Cords, Straps and Elastics	N/A
4.15	Stability and Over-Load Requirements	N/A
4.16	Confined Spaces	N/A
4.17	Wheels, Tires, and Axles	N/A
4.18	Holes, Clearances, and Accessibility of Mechanisms	N/A
4.19	Simulated Protective Devices	N/A
4.20	Pacifiers	N/A
4.21	Projectile Toys	N/A
4.22	Teethers and Teething Toys	N/A
4.23	Rattles	N/A
4.24	Squeeze Toys	N/A
4.25	Battery-Operated Toys (exclude section 4.25.10 Battery-powered ride-on toys and section 4.25.11 Toys 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
4.30	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 material	N/A
4.41	Toy Chests	N/A
5	Labeling Requirements	
5.2	Age Grading Labeling	P
5.3	Safety Labeling Requirements	P

## TEST RESULT

Section	Description	Result
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 an Adult	N/A
5.9	Simulated Protective Devices	N/A
5.10	Toys with Functional Sharp Edges and Sharp Points	N/A
5.11	Small Objects, Small Balls, Marbles and Balloons (16 CFR 1500.19)	P
5.12	Toy Caps (16 CFR 1500.86 for Required Labeling)	N/A
5.13	Art Materials (16 CFR 1500.14(b)(8))	N/A
5.14	Electric Toys	N/A
5.15	Battery-Operated Toys	N/A
5.15.1	Battery-Powered Ride-On Toys	N/A
5.15.2	Button or Coin Cell Batteries	N/A
5.16	Promotional Materials	N/A
5.17	Magnets	N/A
6	Instructional Literature	
6.1	Definition and Description	N/A
6.2	Crib and Playpen Toys	N/A
6.3	Mobiles	N/A
6.4	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
6.8	Toy Chests	N/A
7	Producer's Markings	
7.1	Producer's or Distributor's Name and Address	P
7.2	Battery-Powered Ride-on Toys	N/A
7.3	Toy Chests	N/A

**Remark:**

P – Pass

N/A – Not Applicable

\*\*\*TO BE CONTINUED\*\*\*



## TEST RESULT

### Flammability of Toys

Test Request: As specified in ASTM F963-17, Section 4.2, testing procedure for materials other than textiles (excluding paper) used in toys is contained in Annex A5.

Sample	Limit	Result
A	0.1 inch/second	P
B	0.1 inch/second	P
C	0.1 inch/second	P
D	0.1 inch/second	P
E	0.1 inch/second	P
F	0.1 inch/second	P
G	0.1 inch/second	P
H	0.1 inch/second	P
I	0.1 inch/second	P
J	0.1 inch/second	P
K	0.1 inch/second	P
L	0.1 inch/second	P
M	0.1 inch/second	P

**Remark:**

P – Pass

\*\*\*TO BE CONTINUED\*\*\*

## TEST RESULT

### Heavy Metals

1) ASTM F963-17- Heavy Elements – Total Lead in Paint and Similar Surface-Coating Material(Clause 4.3.5.1(1))

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

Tested Item(s)	Unit	Limit	MDL	Result				
				1	2	3	4	5
Total Lead	mg/kg	90	10	ND	ND	ND	ND	ND

Tested Item(s)	Unit	Limit	MDL	Result				
				6	7	8	9	10
Total Lead	mg/kg	90	10	ND	ND	ND	ND	ND

Tested Item(s)	Unit	Limit	MDL	Result					
				11	12	13	14	15	16
Total Lead	mg/kg	90	10	ND	ND	ND	ND	ND	ND

2) ASTM F963-17- Heavy Elements – Total Lead in Substrate Material (Clause 4.3.5.2(2)(a))

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

Tested Item(s)	Unit	Limit	MDL	Result			
				17	18	19	20
Total Lead	mg/kg	100	10	ND	ND	ND	ND

Tested Item(s)	Unit	Limit	MDL	Result				
				21	22	23	24	25
Total Lead	mg/kg	100	10	ND	ND	ND	ND	ND

Tested Item(s)	Unit	Limit	MDL	Result				
				26	27	28	29	30
Total Lead	mg/kg	100	10	ND	ND	ND	ND	ND

Tested Item(s)	Unit	Limit	MDL	Result	
				31	32
Total Lead	mg/kg	100	10	ND	15

3) ASTM F963-17- Heavy Elements – Total Elements Content, Initial Screening for Soluble Migrated Elements Content in Surface Coatings and Substrates Other Than Modeling Clay(Clause 4.3.5.1(2) and 4.3.5.2(2)(b))

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

Tested Item(s)	Unit	Limit	MDL	Result				
				1	2	3	4	5
Total Antimony	mg/kg	60	5	ND	ND	ND	ND	ND
Total Arsenic	mg/kg	25	5	ND	ND	ND	ND	ND
Total Barium	mg/kg	1000	10	ND	163	ND	492	217
Total Cadmium	mg/kg	75	5	ND	ND	ND	ND	ND
Total Chromium	mg/kg	60	5	ND	ND	ND	ND	ND
Total Lead	mg/kg	90	10	ND	ND	ND	ND	ND
Total Mercury	mg/kg	60	5	ND	ND	ND	ND	ND
Total Selenium	mg/kg	500	10	ND	ND	ND	ND	ND

## TEST RESULT

Tested Item(s)	Unit	Limit	MDL	Result				
				6	7	8	9	10
Total Antimony	mg/kg	60	5	ND	ND	ND	ND	ND
Total Arsenic	mg/kg	25	5	ND	ND	ND	ND	ND
Total Barium	mg/kg	1000	10	830	325	169	393	252
Total Cadmium	mg/kg	75	5	ND	ND	ND	ND	ND
Total Chromium	mg/kg	60	5	ND	ND	ND	ND	ND
Total Lead	mg/kg	90	10	ND	ND	ND	ND	ND
Total Mercury	mg/kg	60	5	ND	ND	ND	ND	ND
Total Selenium	mg/kg	500	10	ND	ND	ND	ND	ND

Tested Item(s)	Unit	Limit	MDL	Result				
				11	12	13	14	15
Total Antimony	mg/kg	60	5	ND	ND	ND	ND	ND
Total Arsenic	mg/kg	25	5	ND	ND	ND	ND	ND
Total Barium	mg/kg	1000	10	ND	ND	ND	1.38x10 <sup>3*</sup>	312
Total Cadmium	mg/kg	75	5	ND	ND	ND	ND	ND
Total Chromium	mg/kg	60	5	ND	ND	ND	ND	ND
Total Lead	mg/kg	90	10	ND	ND	ND	ND	ND
Total Mercury	mg/kg	60	5	ND	ND	ND	ND	ND
Total Selenium	mg/kg	500	10	ND	ND	ND	ND	ND

Tested Item(s)	Unit	Limit	MDL	Result				
				16	17	18	19	20
Total Antimony	mg/kg	60	5	ND	ND	ND	48	ND
Total Arsenic	mg/kg	25	5	ND	ND	ND	ND	ND
Total Barium	mg/kg	1000	10	ND	ND	113	ND	706
Total Cadmium	mg/kg	75	5	ND	ND	ND	ND	ND
Total Chromium	mg/kg	60	5	ND	ND	ND	ND	ND
Total Lead	mg/kg	90	10	ND	ND	ND	ND	ND
Total Mercury	mg/kg	60	5	ND	ND	ND	ND	ND
Total Selenium	mg/kg	500	10	ND	ND	ND	ND	ND

Tested Item(s)	Unit	Limit	MDL	Result				
				21	22	23	24	25
Total Antimony	mg/kg	60	5	ND	70*	ND	ND	ND
Total Arsenic	mg/kg	25	5	ND	ND	ND	ND	ND
Total Barium	mg/kg	1000	10	ND	ND	ND	187	ND
Total Cadmium	mg/kg	75	5	ND	ND	ND	ND	ND
Total Chromium	mg/kg	60	5	ND	ND	ND	ND	ND
Total Lead	mg/kg	90	10	ND	ND	ND	ND	ND
Total Mercury	mg/kg	60	5	ND	ND	ND	ND	ND
Total Selenium	mg/kg	500	10	ND	ND	ND	ND	ND

## TEST RESULT

Tested Item(s)	Unit	Limit	MDL	Result			
				26	27	28	29
Total Antimony	mg/kg	60	5	ND	ND	ND	38
Total Arsenic	mg/kg	25	5	ND	ND	ND	ND
Total Barium	mg/kg	1000	10	ND	ND	ND	ND
Total Cadmium	mg/kg	75	5	ND	ND	ND	ND
Total Chromium	mg/kg	60	5	ND	ND	ND	ND
Total Lead	mg/kg	90	10	ND	ND	ND	ND
Total Mercury	mg/kg	60	5	ND	ND	ND	ND
Total Selenium	mg/kg	500	10	ND	ND	ND	ND

4) ASTM F963-17- Heavy Elements – Soluble Migrated Elements Content in Surface Coatings and Substrates Other Than Modeling Clay (Clause 4.3.5.1(2) and 4.3.5.2(2)(b))

Test Method: ASTM International Standard ASTM F963-17, Section 8.3.2 to 8.3.5 (excluding 8.3.5.5(3))

Tested Item(s)	Unit	Limit	MDL	Result		
				14	22	30
Soluble Antimony	mg/kg	60	5	ND	ND	ND
Soluble Arsenic	mg/kg	25	5	ND	ND	ND
Soluble Barium	mg/kg	1000	10	65	ND	ND
Soluble Cadmium	mg/kg	75	5	ND	ND	ND
Soluble Chromium	mg/kg	60	5	ND	ND	ND
Soluble Lead	mg/kg	90	10	ND	ND	ND
Soluble Mercury	mg/kg	60	5	ND	ND	ND
Soluble Selenium	mg/kg	500	10	ND	ND	ND

**Remark:**

mg/kg = milligram per kilogram

MDL = method detection limit

ND = Not detected, less than MDL

The analytical results were adjusted by subtracting analytical correction factor.

\* On the initial analysis for soluble heavy metals content, any tested component of greater than the set limit, the result is inconclusive for the requirement and therefore were retested with soluble heavy metals analysis of ASTM F963-17, Sections 8.3.2 to 8.3.5 as specified in Section 8.3.1.3. The result herein is for reference only (show data), please refer to soluble heavy metals content analysis for the corresponding conclusive results.

\*\*\*TO BE CONTINUED\*\*\*

## TEST RESULT

### Total Lead Content in Paint / Surface Coating

Test Request: Total lead in paint/ similar surface coatings as specified in US Consumer Product Safety Improvement Act 2008 (CPSIA), Section 101

Test Method: CPSC-CH-E1003-09.1  
The sample was acid digested, and total lead content was determined by ICP-OES.

Tested Item(s)	Unit	Limit	MDL	Result			
				1+2+3	4+5+6	7+8+9	10+11+12
Total Lead(Pb)	mg/kg	90	10	ND	ND	ND	ND

Tested Item(s)	Unit	Limit	MDL	Result	
				13+14+15	16
Total Lead(Pb)	mg/kg	90	10	ND	ND

**Remark:**

mg/kg = milligram per kilogram

MDL = method detection limit

ND = Not detected, less than MDL

According to client's request, tests are combination tests. The experimental results are the total result of mixed samples.

\*\*\*TO BE CONTINUED\*\*\*

## TEST RESULT

### Total Lead Content in Substrate

Test Request: Total lead in substrate as specified in US Consumer Product Safety Improvement Act 2008 (CPSIA), Section 101

Test Method: CPSC-CH-E1001-08.3, CPSC-CH-E1002-08.3  
The sample was acid digested, and total lead content was determined by ICP-OES.

Tested Item(s)	Unit	Limit	MDL	Result			
				17+18+19	20+21+22	23+24+25	26+27+28
Total Lead(Pb)	mg/kg	100	10	ND	ND	ND	ND

Tested Item(s)	Unit	Limit	MDL	Result			
				29	30	31	32
Total Lead(Pb)	mg/kg	100	10	ND	ND	ND	15

**Remark:**

mg/kg = milligram per kilogram

MDL = method detection limit

ND = Not detected, less than MDL

According to client's request, tests are combination tests. The experimental results are the total result of mixed samples.

\*\*\*TO BE CONTINUED\*\*\*



## TEST RESULT

### Phthalates Content

Test Request: Phthalates Content as specified in US Consumer Product Safety Improvement Act 2008 (CPSIA), Section 108

Test Method: CPSC-CH-C1001-09.4

Tested Item(s)	CAS No.	Unit	Limit	MDL	Result	
					1+2+3	4+5+6
For toys and childcare articles						
Dibutylphthalate (DBP)	84-74-2	%	0.1	0.005	ND	ND
Di-2-ethylhexylphthalate (DEHP)	117-81-7	%	0.1	0.005	ND	ND
Benzylbutylphthalate (BBP)	85-68-7	%	0.1	0.005	ND	ND
Additional requirements for toys and childcare articles, which can be placed in the mouth by children						
Diisononyl phthalate (DINP)	68515-48-0	%	0.1	0.005	ND	ND
Di-n-octylphthalate (DNOP)	117-84-0	%	0.1	0.005	ND	ND
Di-iso-decylphthalate (DIDP)	26761-40-0	%	0.1	0.005	ND	ND

Tested Item(s)	CAS No.	Unit	Limit	MDL	Result	
					7+8+9	10+11+12
For toys and childcare articles						
Dibutylphthalate (DBP)	84-74-2	%	0.1	0.005	ND	ND
Di-2-ethylhexylphthalate (DEHP)	117-81-7	%	0.1	0.005	ND	ND
Benzylbutylphthalate (BBP)	85-68-7	%	0.1	0.005	ND	ND
Additional requirements for toys and childcare articles, which can be placed in the mouth by children						
Diisononyl phthalate (DINP)	68515-48-0	%	0.1	0.005	ND	ND
Di-n-octylphthalate (DNOP)	117-84-0	%	0.1	0.005	ND	ND
Di-iso-decylphthalate (DIDP)	26761-40-0	%	0.1	0.005	ND	ND

Tested Item(s)	CAS No.	Unit	Limit	MDL	Result		
					13+14+15	16	17+18+19
For toys and childcare articles							
Dibutylphthalate (DBP)	84-74-2	%	0.1	0.005	ND	ND	ND
Di-2-ethylhexylphthalate (DEHP)	117-81-7	%	0.1	0.005	ND	ND	ND
Benzylbutylphthalate (BBP)	85-68-7	%	0.1	0.005	ND	ND	ND
Additional requirements for toys and childcare articles, which can be placed in the mouth by children							
Diisononyl phthalate (DINP)	68515-48-0	%	0.1	0.005	ND	ND	ND
Di-n-octylphthalate (DNOP)	117-84-0	%	0.1	0.005	ND	ND	ND
Di-iso-decylphthalate (DIDP)	26761-40-0	%	0.1	0.005	ND	ND	ND

## TEST RESULT

Tested Item(s)	CAS No.	Unit	Limit	MDL	Result	
					20+21+22	23+24+25
For toys and childcare articles						
Dibutylphthalate (DBP)	84-74-2	%	0.1	0.005	ND	ND
Di-2-ethylhexylphthalate (DEHP)	117-81-7	%	0.1	0.005	ND	ND
Benzylbutylphthalate (BBP)	85-68-7	%	0.1	0.005	ND	ND
Additional requirements for toys and childcare articles, which can be placed in the mouth by children						
Diisononyl phthalate (DINP)	68515-48-0	%	0.1	0.005	ND	ND
Di-n-octylphthalate (DNOP)	117-84-0	%	0.1	0.005	ND	ND
Di-iso-decylphthalate (DIDP)	26761-40-0	%	0.1	0.005	ND	ND

**Remark:**

MDL = method detection limit

ND = Not detected, less than MDL

According to client's request, tests are combination tests. The experimental results are the total result of mixed samples.

\*\*\*END OF THE REPORT\*\*\*