



# CMA Testing and Certification Laboratories

廠商會檢定中心

## TEST REPORT

Report No : AY0054957(8)

Date: 04 Nov 2019

Application No : LY032496(2)

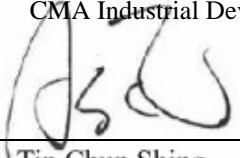
Applicant : YOSHIRITSU CO., LTD.  
1563 KOSHIBE, OYODO YOSHINO, NARA 638-0803 JAPAN

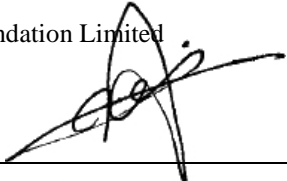
Sample : Five (5) submitted sample(s) stated to be :  
Description Name of Parts :

- > - LaQ RED No.1-7
- > - LaQ BLUE No.1-7
- > - LaQ YELLOW No.1-7
- > - LaQ GREEN No.1-7
- > - LaQ PINK No.1-7
- > - LaQ SKY BLUE No.1-7
- > - LaQ ORANGE No.1-7
- > - LaQ LIME No.1-7
- > - LaQ WHITE No.1-7
- > - LaQ BLACK No.1-7
- > - LaQ BROWN No.1-7
- > - LaQ GRAY No.1-7
- > - LaQ CLEAR No.1-7
- > - LaQ CLEAR RED No.1-7
- > - LaQ CLEAR BLUE No.1-7
- > - LaQ CLEAR YELLOW No.1-7
- > - LaQ HAMACRON CONSTRUCTOR WHEEL
- > - LaQ HAMACRON CONSTRUCTOR SHAFT
- > - LaQ HAMACRON CONSTRUCTOR MIDDLE SIZE WHEEL
- > - LaQ HAMACRON CONSTRUCTOR LONG SHAFT
- > - LaQ HAMACRON CONSTRUCTOR MINI WHEEL
- > - LaQ HAMACRON CONSTRUCTOR MINI SHAFT
- > - LaQ SWEET COLLECTION HEADBAND
- > - Blister Case ORANGE
- > - Blister Case RED
- > - Blister Case BLUE
- > - Blister Case PINK
- > - Blister Case LIME
- > - Plastic Container (Small)
- > - Plastic Container (Large)

For and on behalf of  
CMA Industrial Development Foundation Limited

Authorized Signature : \_\_\_\_\_

  
Tin Chun Shing  
Assistant Manager

  
Wan Leong Hang  
Deputy Manager

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Sample : Item Name  
Description : (A) LaQ SWEET COLLECTION UNICORN  
(B) LaQ SWEET COLLECTION DRESS UP  
(C) LaQ BASIC 1400  
(D) LaQ BASIC 8400  
(E) LaQ BONUS SET  
Labelled Age Grading : Age 5 years and up  
Appropriate Age Grade : Age 6 years and up  
Client's Requested Age Grading : Not Requested  
Tested Age Grade : Age 5 years and up  
Country of Origin : Japan

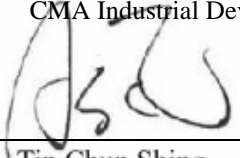
Date Received : 03 Oct 2019.  
22 Oct 2019.

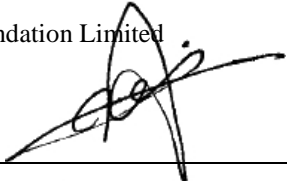
Test Period : 03 Oct 2019 to 01 Nov 2019.

Test Requested	Test Item	Result
I.	EN71 : Part 1 : 2014 + A1 : 2018 - Physical and Mechanical Properties	Passed
II.	EN71 : Part 2 : 2011 + A1 : 2014 - Flammability test	Passed
III.	EN71 : Part 3 : 2013 + A1 : 2014 - Migration of certain elements (Aluminium, Antimony, Arsenic, Barium, Boron, Cadmium, Chromium (III), Chromium (VI), Cobalt, Copper, Lead, Manganese, Mercury, Nickel, Selenium, Strontium, Tin, Organic Tin and Zinc).	Passed
IV.	Regulation (EC) No. 1907/2006 of the European Parliament and of the Council, Annex XVII, Entry 23 and its amendment Regulation (EU) No. 494/2011 and No. 835/2012 - Cadmium content (formerly Directive 91/338/EEC)	Passed
V.	Regulation (EC) No. 1907/2006 of the European Parliament and of the Council, Annex XVII - Phthalates contents (formerly Directive 2005/84/EC)	Passed

For and on behalf of  
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Assistant Manager

  
Wan Leong Hang  
Deputy Manager

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Test Requested :	<u>Test Item</u>	<u>Result</u>
VI.	ASTM F963-17	
	- Physical and Mechanical Tests	Passed
	- Flammability Test	Passed
	- Heavy Elements Test (Clause 4.3.5)	Passed
VII.	Lead content in accordance with U.S. Consumer Product Safety Improvement Act of 2008 - Sec. 101 : Children's Products Containing Lead; Lead Paint Rule	Passed
VIII.	16 CFR Part 1307 - Prohibition of Children Toys and Child Care Articles Containing Specified Phthalates	Passed

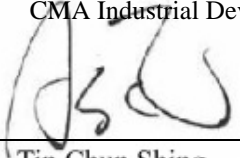
Test Result : Refer to the result pages for details.

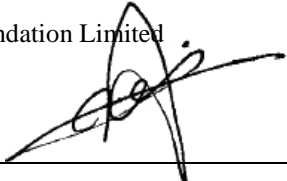
Remark : (i) The data of Test III to VIII of this report were transferred from test Report No. AW0058397(0) issued on 31 Oct 2018.

: (ii) The data of sample No. 1 to 40 of Test (VI) of this report were transferred from test Report No. AW0058397(0) issued on 31 Oct 2018.

For and on behalf of  
CMA Industrial Development Foundation Limited

Authorized Signature : \_\_\_\_\_

  
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Assistant Manager

  
Wan Leong Hang  
Deputy Manager

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## TEST REPORT

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Application No : LY032496(2)

Test Result :

I. EN71 : Part 1 : 2014 + A1 : 2018 (for item “A” to “B” only)

<u>Clause</u>	<u>Title/Description</u>	<u>Remark*</u>
4	General requirements	
4.1	Material cleanliness	C
4.7	Edges	C
4.8	Points and metallic wires	C
6	Packaging	C
7	Warnings, markings and instructions for use	
7.1	General	C
7.2	Toys not intended for children under 36 months	C

I. EN71 : Part 1 : 2014 + A1 : 2018 (for item “C” to “D” only)

<u>Clause</u>	<u>Title/Description</u>	<u>Remark*</u>
4	General requirements	
4.1	Material cleanliness	C
4.7	Edges	C
4.8	Points and metallic wires	C
4.9	Protruding parts	C
6	Packaging	C
7	Warnings, markings and instructions for use	
7.1	General	C
7.2	Toys not intended for children under 36 months	C





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Test Result :

II. EN71 : Part 2 : 2011 + A1 : 2014

<u>Clause</u>	<u>Title/Description</u>	<u>Remark*</u>
4.1	General requirements	C

Note : No cellulose nitrate and material with same behaviour in fire was detected

\* Abbreviation : C = Complied



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Test Result :

III. EN 71 : Part 3 : 2013 + A1 : 2014

Test Method : Heavy element analysis was determined by Inductively Coupled Plasma Spectrometry (ICP-OES) and/or Inductively Coupled Plasma Mass Spectrometry (ICP-MS) and/or Liquid Chromatograph-Inductively Coupled Plasma Mass Spectrometry (LC-ICP-MS) and/or Gas Chromatography Mass Spectrometry (GCMS).

Category III – Scraped-off toy material

Element	Migration limit (mg/kg)	Result (mg/kg)					
		Sample					
		1	2	3	4	5	6
Aluminium (Al)	70,000	<100	<100	<100	<100	<100	<100
Antimony (Sb)	560	<5	<5	<5	<5	<5	<5
Arsenic (As)	47	<5	<5	<5	<5	<5	<5
Barium (Ba)	18,750	<20	<20	<20	<20	<20	<20
Boron (B)	15,000	<100	<100	<100	<100	<100	<100
Cadmium (Cd)	17	<5	<5	<5	<5	<5	<5
Chromium (III)	460	<1	<1	<1	<1	<1	<1
Chromium (VI)	0.2	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15
Cobalt (Co)	130	<5	<5	<5	<5	<5	<5
Copper (Cu)	7,700	<5	<5	<5	<5	<5	<5
Lead (Pb)	160	<5	<5	<5	<5	<5	<5
Manganese (Mn)	15,000	<100	<100	<100	<100	<100	<100
Mercury (Hg)	94	<5	<5	<5	<5	<5	<5
Nickel (Ni)	930	<5	<5	<5	<5	<5	<5
Selenium (Se)	460	<5	<5	<5	<5	<5	<5
Strontium (Sr)	56,000	<100	<100	<100	<100	<100	<100
Tin (Sn)	180,000	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
Organic tin <sup>#</sup>	12	<8	<8	<8	<8	<8	<8
Zinc (Zn)	46,000	<100	<100	<100	<100	<100	<100



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Category III – Scraped-off toy material

Element	Migration limit (mg/kg)	Result (mg/kg)					
		Sample					
		7	8	9	10	11	12
Aluminium (Al)	70,000	<100	<100	<100	<100	<100	<100
Antimony (Sb)	560	<5	<5	<5	<5	<5	<5
Arsenic (As)	47	<5	<5	<5	<5	<5	<5
Barium (Ba)	18,750	<20	<20	<20	<20	<20	<20
Boron (B)	15,000	<100	<100	<100	<100	<100	<100
Cadmium (Cd)	17	<5	<5	<5	<5	<5	<5
Chromium (III)	460	<1	<1	<1	<1	<1	<1
Chromium (VI)	0.2	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15
Cobalt (Co)	130	<5	<5	<5	<5	<5	<5
Copper (Cu)	7,700	<5	<5	<5	<5	<5	<5
Lead (Pb)	160	<5	<5	<5	<5	<5	<5
Manganese (Mn)	15,000	<100	<100	<100	<100	<100	<100
Mercury (Hg)	94	<5	<5	<5	<5	<5	<5
Nickel (Ni)	930	<5	<5	<5	<5	<5	<5
Selenium (Se)	460	<5	<5	<5	<5	<5	<5
Strontium (Sr)	56,000	<100	<100	<100	<100	<100	<100
Tin (Sn)	180,000	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
Organic tin <sup>#</sup>	12	<8	<8	<8	<8	<8	<8
Zinc (Zn)	46,000	<100	<100	<100	<100	<100	<100



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Category III – Scraped-off toy material

Element	Migration limit (mg/kg)	Result (mg/kg)					
		Sample					
		13	14	15	16	17	18
Aluminium (Al)	70,000	<100	<100	<100	<100	<100	<100
Antimony (Sb)	560	<5	<5	<5	<5	<5	<5
Arsenic (As)	47	<5	<5	<5	<5	<5	<5
Barium (Ba)	18,750	<20	<20	<20	<20	<20	<20
Boron (B)	15,000	<100	<100	<100	<100	<100	<100
Cadmium (Cd)	17	<5	<5	<5	<5	<5	<5
Chromium (III)	460	<1	<1	<1	<1	<1	<1
Chromium (VI)	0.2	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15
Cobalt (Co)	130	<5	<5	<5	<5	<5	<5
Copper (Cu)	7,700	<5	<5	<5	<5	<5	<5
Lead (Pb)	160	<5	<5	<5	<5	<5	<5
Manganese (Mn)	15,000	<100	<100	<100	<100	<100	<100
Mercury (Hg)	94	<5	<5	<5	<5	<5	<5
Nickel (Ni)	930	<5	<5	<5	<5	<5	<5
Selenium (Se)	460	<5	<5	<5	<5	<5	<5
Strontium (Sr)	56,000	<100	<100	<100	<100	<100	<100
Tin (Sn)	180,000	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
Organic tin <sup>#</sup>	12	<8	<8	<8	<8	<8	<8
Zinc (Zn)	46,000	<100	<100	<100	<100	<100	<100





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Test Method : Heavy element analysis was determined by Inductively Coupled Plasma Spectrometry (ICP-OES) and/or Inductively Coupled Plasma Mass Spectrometry (ICP-MS) and/or Liquid Chromatograph-Inductively Coupled Plasma Mass Spectrometry (LC-ICP-MS) and/or Gas Chromatography Mass Spectrometry (GCMS).

Category III – Scraped-off toy material

Element	Migration limit (mg/kg)	Result (mg/kg)					
		Sample					
		19	20	21	22	23	24
Aluminium (Al)	70,000	<100	<100	<100	<100	<100	<100
Antimony (Sb)	560	<5	<5	<5	<5	<5	<5
Arsenic (As)	47	<5	<5	<5	<5	<5	<5
Barium (Ba)	18,750	<20	<20	<20	<20	<20	<20
Boron (B)	15,000	<100	<100	<100	<100	<100	<100
Cadmium (Cd)	17	<5	<5	<5	<5	<5	<5
Chromium (III)	460	<1	<1	<1	<1	<1	<1
Chromium (VI)	0.2	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15
Cobalt (Co)	130	<5	<5	<5	<5	<5	<5
Copper (Cu)	7,700	<5	<5	<5	<5	<5	<5
Lead (Pb)	160	<5	<5	<5	<5	<5	<5
Manganese (Mn)	15,000	<100	<100	<100	<100	<100	<100
Mercury (Hg)	94	<5	<5	<5	<5	<5	<5
Nickel (Ni)	930	<5	<5	<5	<5	<5	<5
Selenium (Se)	460	<5	<5	<5	<5	<5	<5
Strontium (Sr)	56,000	<100	<100	<100	<100	<100	<100
Tin (Sn)	180,000	<2.5	<2.5	<2.5	<2.5	<100	<100
Organic tin <sup>#</sup>	12	<8	<8	<8	<8	<8	<8
Zinc (Zn)	46,000	<100	<100	<100	<100	<100	<100



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III. EN 71 : Part 3 : 2013 + A1 : 2014

Test Method : Heavy element analysis was determined by Inductively Coupled Plasma Spectrometry (ICP-OES) and/or Inductively Coupled Plasma Mass Spectrometry (ICP-MS) and/or Liquid Chromatograph-Inductively Coupled Plasma Mass Spectrometry (LC-ICP-MS) and/or Gas Chromatography Mass Spectrometry (GCMS).

Category III – Scraped-off toy material

Element	Migration limit (mg/kg)	Result (mg/kg)				
		Sample				
		25	26	27	28	29
Aluminium (Al)	70,000	<100	<100	<100	<100	<100
Antimony (Sb)	560	<5	<5	<5	<5	<5
Arsenic (As)	47	<5	<5	<5	<5	<5
Barium (Ba)	18,750	<20	<20	<20	<20	<20
Boron (B)	15,000	<100	<100	<100	<100	<100
Cadmium (Cd)	17	<5	<5	<5	<5	<5
Chromium (III)	460	<1	<1	<1	<1	<1
Chromium (VI)	0.2	<0.15	<0.15	<0.15	<0.15	<0.15
Cobalt (Co)	130	<5	<5	<5	<5	<5
Copper (Cu)	7,700	<5	<5	<5	<5	<5
Lead (Pb)	160	<5	<5	<5	<5	<5
Manganese (Mn)	15,000	<100	<100	<100	<100	<100
Mercury (Hg)	94	<5	<5	<5	<5	<5
Nickel (Ni)	930	<5	<5	<5	<5	<5
Selenium (Se)	460	<5	<5	<5	<5	<5
Strontium (Sr)	56,000	<100	<100	<100	<100	<100
Tin (Sn)	180,000	<100	<100	<100	<100	<100
Organic tin <sup>#</sup>	12	<8	<8	<8	<8	<8
Zinc (Zn)	46,000	<100	<100	<100	<100	<100

- Note :
- All results are in mg/kg
  - < denotes less than
  - ≥ denotes greater than or equal to
  - For samples of migrated chromium content lower than migration limit of chromium (VI), no speciation test for chromium (III) and chromium (VI) were conducted. The results were derived from that of total chromium
  - For samples of migrated tin content calculated as tributyl tin lower than migration limit of organic tin, no organic tin test was conducted. Organic tin results were derived from that of total tin



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Category III – Scraped-off toy material

- Note :
- The samples with sample weight less than 100 mg, were assumed to be 100 mg in calculation (except glass/ceramic/metallic materials)
  - \*Organic tin compounds under investigation are limited to methyltin, butyltin, dibutyltin, tributyltin, tetrabutyltin, monooctyltin, dioctyltin, dipropyltin, diphenyltin and triphenyltin. Other organic tin compounds may also be present in toys

Sample	Description	Sample weight
1	Red plastic of red parts	≥100 mg
2	Blue plastic of blue parts	≥100 mg
3	Yellow plastic of yellow parts	≥100 mg
4	Green plastic of green parts	≥100 mg
5	Pink plastic of pink parts	≥100 mg
6	Sky blue plastic of sky blue parts	≥100 mg
7	Orange plastic of orange parts	≥100 mg
8	Lime plastic of lime parts	≥100 mg
9	White plastic of white parts	≥100 mg
10	Black plastic of black parts	≥100 mg
11	Brown plastic of brown parts	≥100 mg
12	Gray plastic of gray parts	≥100 mg
13	Clear plastic of clear parts	≥100 mg
14	Clear red plastic of clear red parts	≥100 mg
15	Clear blue plastic of clear blue parts	≥100 mg
16	Clear yellow plastic of clear yellow parts	≥100 mg
17	Greyish blue plastic of large wheel	≥100 mg
18	Bright black plastic of shaft, long shaft, mini shaft	≥100 mg
19	Dull white plastic of inner part of middle size wheel, mini wheel	≥100 mg
20	Black soft plastic of tire of middle size wheel, mini wheel	≥100 mg
21	Dull white plastic of headband	≥100 mg
22	Blue plastic of blue box	≥100 mg
23	Orange plastic of orange box	≥100 mg
24	Red plastic of red box	≥100 mg
25	Pink plastic of pink box	≥100 mg
26	Lime plastic of lime box	≥100 mg
27	Clear sky blue plastic of cover of small box, large box	≥100 mg
28	Dull white plastic of locks of small box, large box	≥100 mg
29	Clear plastic of body of small box, large box	≥100 mg



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Test Result :

- IV. Regulation (EC) No. 1907/2006 of the European Parliament and of the Council, Annex XVII, Entry 23 and its amendment Regulation (EU) No. 494/2011 and No. 835/2012  
- Cadmium content (formerly Directive 91/338/EEC).

Test Method : Acid digestion followed by Atomic Absorption Spectrophotometry and/or Inductively Coupled Plasma Spectrometry (ICP-OES) analysis.

### For plastic material

	<u>Test item</u>
	Total Cadmium
Maximum permissible level (mg/kg)	100
Sample	
#1	<5
#2	<5
#3	<5
#4	<5
#5	<5
#6	<5
#7	<5
#8	<5
#9	<5
#10	<5
#11	<5

- Note :
- All results are in mg/kg
  - < denotes less than
  - # denotes composite sample. The results for composite sample are calculated based on the component with the least weight.





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- Cadmium content (formerly Directive 91/338/EEC).

Test Method : Acid digestion followed by Atomic Absorption Spectrophotometry and/or Inductively Coupled Plasma Spectrometry (ICP-OES) analysis.

Sample	Description
#1	Red plastic of red parts + Blue plastic of blue parts + Yellow plastic of yellow parts
#2	Green plastic of green parts + Pink plastic of pink parts + Sky blue plastic of sky blue parts
#3	Orange plastic of orange parts + Lime plastic of lime parts + White plastic of white parts
#4	Black plastic of black parts + Brown plastic of brown parts + Gray plastic of gray parts
#5	Clear plastic of clear parts + Clear red plastic of clear red parts + Clear blue plastic of clear blue parts
#6	Clear yellow plastic of yellow parts + Greyish blue plastic of large wheel + Bright black plastic of shaft, long shaft, mini shaft
#7	Dull white plastic of inner part of middle size wheel, mini wheel + Black soft plastic of tire of middle size wheel, mini wheel
#8	Dull white plastic of headband + Blue plastic of blue box
#9	Orange plastic of orange box + Red plastic of red box
#10	Pink plastic of pink box + Lime plastic of lime box
#11	Clear sky blue plastic of cover of small box, large box + Dull white plastic of locks of small box, large box + Clear plastic of body of small box, large box



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Application No : LY032496(2)

Test Result :

V. Regulation (EC) No. 1907/2006 of the European Parliament and of the Council, Annex XVII  
- Phthalates contents (formerly Directive 2005/84/EC)

Test Method : Phthalate analysis was determined by Gas Chromatography.

Sample	Test Item					
	DEHP	DBP	BBP	DINP	DIDP	DNOP
#1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
#2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
#3	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
#4	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
#5	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
#6	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
#7	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
#8	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
#9	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
#10	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
#11	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

- Requirement :
1. Concentration of DEHP, DBP and BBP of plasticized materials in toys and childcare articles shall not exceed 0.1% by weight.
  2. Concentration of DINP, DIDP and DNOP of plasticized materials in toys and childcare articles which can be placed in the mouth by children shall not exceed 0.1% by weight.

- Note :
- All results are in % w/w
  - % w/w denotes percentage by weight
  - < denotes less than
  - # denotes composite sample. The results for composite sample are calculated based on the component with the least weight.
  - DEHP = Di (2-ethylhexyl) Phthalate; DBP = Dibutyl Phthalate; BBP = Butyl Benzyl Phthalate; DINP = Diisononyl Phthalate; DIDP = Diisodecyl Phthalate; DNOP = Di-n-octyl Phthalate



# CMA Testing and Certification Laboratories

廠商會檢定中心

## TEST REPORT

Report No : AY0054957(8)

Date: 04 Nov 2019

Application No : LY032496(2)

Test Result :

- V. Regulation (EC) No. 1907/2006 of the European Parliament and of the Council, Annex XVII  
- Phthalates contents (formerly Directive 2005/84/EC)

Sample	Description
#1	Red plastic of red parts + Blue plastic of blue parts + Yellow plastic of yellow parts
#2	Green plastic of green parts + Pink plastic of pink parts + Sky blue plastic of sky blue parts
#3	Orange plastic of orange parts + Lime plastic of lime parts + White plastic of white parts
#4	Black plastic of black parts + Brown plastic of brown parts + Gray plastic of gray parts
#5	Clear plastic of clear parts + Clear red plastic of clear red parts + Clear blue plastic of clear blue parts
#6	Clear yellow plastic of clear yellow parts + Greyish blue plastic of large wheel + Bright black plastic of shaft, long shaft, mini shaft
#7	Dull white plastic of inner part of middle size wheel, mini wheel + Black soft plastic of tire of middle size wheel, mini wheel
#8	Dull white plastic of headband + Blue plastic of blue box
#9	Orange plastic of orange box + Red plastic of red box
#10	Pink plastic of pink box + Lime plastic of lime box
#11	Clear sky blue plastic of cover of small box, large box + Dull white plastic of locks of small box, large box + Clear plastic of body of small box, large box



# CMA Testing and Certification Laboratories

廠商會檢定中心

## TEST REPORT

Report No : AY0054957(8)

Date: 04 Nov 2019

Application No : LY032496(2)

Test Result :

### IV. ASTM F963-17

#### **a. Physical and Mechanical Tests (for item “A” and “B” only)**

<u>Clause</u>	<u>Title/Description</u>	<u>Remark*</u>
4.1	Material Quality – Visual Inspection	C
4.6.3	Toys intended for children $\geq 3$ years but $< 6$ years 16 CFR 1500.19 Small objects labeling requirement	C
4.7	Accessible edges 16 CFR 1500.49 Sharp metal or glass edges	C
4.9	Accessible points 16 CFR 1500.48 Sharp points	C
4.12	Plastic film	C
5	Labeling requirements	
5.3	Safety labeling requirements	C
5.11	Small objects, small balls, marbles, and balloons 16 CFR 1500.19	C
7	Producer's markings	
7.1	Producer's markings	C





# CMA Testing and Certification Laboratories

廠商會檢定中心

## TEST REPORT

Report No : AY0054957(8)

Date: 04 Nov 2019

Application No : LY032496(2)

Test Result :

### **a. Physical and Mechanical Tests (for item “C” to “E” only)**

<u>Clause</u>	<u>Title/Description</u>	<u>Remark*</u>
4.1	Material Quality – Visual Inspection	C
4.6.3	Toys intended for children $\geq 3$ years but $< 6$ years 16 CFR 1500.19 Small objects labeling requirement	C
4.7	Accessible edges 16 CFR 1500.49 Sharp metal or glass edges	C
4.8	Projections	C
4.9	Accessible points 16 CFR 1500.48 Sharp points	C
4.12	Plastic film	C
4.17	Wheels, tires, and axles	C
5	Labeling requirements	
5.3	Safety labeling requirements	C
5.11	Small objects, small balls, marbles, and balloons 16 CFR 1500.19	C
7	Producer's markings	
7.1	Producer's markings	C



# CMA Testing and Certification Laboratories

廠商會檢定中心

## TEST REPORT

Report No : AY0054957(8)

Date: 04 Nov 2019

Application No : LY032496(2)

Test Result :

Remark : The sample(s) were subjected to the normal use and abuse tests in according with Clause 8.5 Normal Use Testing, 8.7 Impact test, 8.8 Torque test, 8.9 Tension test, 8.10 Compression test and 8.12 Flexure test whichever was applicable.

Use and abuse test criteria:

Test	Age Category, months	Test Parameters	16 CFR Reference
Drop test	0 to 18	10 x 4.5 ft	1500.51(b)(3)
	over 18 to 36	4 x 3 ft	1500.52(b)(3)
	over 36 to 96	4 x 3 ft	1500.53(b)(3)
Tip over test	-	3 times	1500.51/52/53 (b)(4)
Tumble test	-	2 x 4 attitudes	-
Steel ball impact test	-	50 inches	-
Torque test	0 to 18	2 in-lbf	1500.51(e)
	over 18 to 36	3 in-lbf	1500.52(e)
	over 36 to 96	4 in-lbf	1500.53(e)
Tension test	0 to 18	10 lbf	1500.51(f)
	over 18 to 36	15 lbf	1500.52(f)
	over 36 to 96	15 lbf	1500.53(f)
Compression test	0 to 18	20 lbf	1500.51(g)
	over 18 to 36	25 lbf	1500.52(g)
	over 36 to 96	30 lbf	1500.53(g)
Flexure test	0 to 18	120° x 30 cycles (10 lbf)	1500.51(d)
	over 18 to 36	120° x 30 cycles (15 lbf)	1500.52(d)
	over 36 to 96	120° x 30 cycles (15 lbf)	1500.53(d)

### **b. Flammability Test**

Clause	Title/Description	Remark*
4.2	Flammability	C
	<u>Materials other than textiles</u> (16 CFR 1500.3 (c) (6) (vi))	
	Test method : Annex A5 (16 CFR 1500.44)	

\* Abbreviation : C = Complied



# CMA Testing and Certification Laboratories

廠商會檢定中心

## TEST REPORT

Report No : AY0054957(8)

Date: 04 Nov 2019

Application No : LY032496(2)

Test Result :

VI. ASTM F963-17

### c. Heavy Elements Test

Clause                      Title/Description

4.3.5.2 (2)(a)              Toy substrate materials, total lead content

Test Method : Total lead was tested in accordance with CPSC-CH-E1001-08.3/ CPSC-CH-E1002-08.3 and/ or with reference to ASTM F2853-10 (2015 reapproved)

	<u>Test Item</u>
	Total Lead
Permissible Limit (ppm)	100(**)
Sample	
#1	<15
#2	<15
#3	<15
#4	<15
#5	<15
#6	<15
#7	<15
#8	<15
#9	<15
#10	<15
#11	<15

Note : • (\*\*) 100 ppm limit applies to product produced on or after 14 Aug 2011  
• All results are in ppm  
• < denotes less than  
• # denotes composite sample. The results for composite sample are calculated based on the component with the least weight.



# CMA Testing and Certification Laboratories

廠商會檢定中心

## TEST REPORT

Report No : AY0054957(8)

Date: 04 Nov 2019

Application No : LY032496(2)

Test Result :

VI. ASTM F963-17

### c. Heavy Elements Test

Clause                      Title/Description

4.3.5.2 (2)(a)              Toy substrate materials, total lead content

Test Method : Total lead was tested in accordance with CPSC-CH-E1001-08.3/ CPSC-CH-E1002-08.3 and/ or with reference to ASTM F2853-10 (2015 reapproved)

Sample	Description
#1	Red plastic of red parts + Blue plastic of blue parts + Yellow plastic of yellow parts
#2	Green plastic of green parts + Pink plastic of pink parts + Sky blue plastic of sky blue parts
#3	Orange plastic of orange parts + Lime plastic of lime parts + White plastic of white parts
#4	Black plastic of black parts + Brown plastic of brown parts + Gray plastic of gray parts
#5	Clear plastic of clear parts + Clear red plastic of clear red parts + Clear blue plastic of clear blue parts
#6	Clear yellow plastic of clear yellow parts + Greyish blue plastic of large wheel + Bright black plastic of shaft, long shaft, mini shaft
#7	Dull white plastic of inner part of middle size wheel, mini wheel + Black soft plastic of tire of middle size wheel, mini wheel
#8	Dull white plastic of headband + Blue plastic of blue box
#9	Orange plastic of orange box + Red plastic of red box
#10	Pink plastic of pink box + Lime plastic of lime box
#11	Clear sky blue plastic of cover of small box, large box + Dull white plastic of locks of small box, large box + Clear plastic of body of small box, large box





# CMA Testing and Certification Laboratories

廠商會檢定中心

## TEST REPORT

Report No : AY0054957(8)

Date: 04 Nov 2019

Application No : LY032496(2)

Test Result :

VI. ASTM F963-17

### c. Heavy Elements Test

Clause                      Title/Description

4.3.5.2 (2)(b)              Toy substrate materials, soluble heavy elements

Test Method : Soluble heavy elements were conducted in accordance with clause 8.3 of ASTM F963-17

	<u>Test Item</u>							
	As	Hg	Se	Cd	Sb	Pb	Cr	Ba
Maximum Permissible Level (ppm)	25	60	500	75	60	90	60	1000
Sample								
12	<5	<5	<5	<5	<5	<5	<5	<20
13	<5	<5	<5	<5	<5	<5	<5	<20
14	<5	<5	<5	<5	<5	<5	<5	<20
15	<5	<5	<5	<5	<5	<5	<5	<20
16	<5	<5	<5	<5	<5	<5	<5	<20
17	<5	<5	<5	<5	<5	<5	<5	<20
18	<5	<5	<5	<5	<5	<5	<5	<20
19	<5	<5	<5	<5	<5	<5	<5	<20
20	<5	<5	<5	<5	<5	<5	<5	<20
21	<5	<5	<5	<5	<5	<5	<5	<20
22	<5	<5	<5	<5	<5	<5	<5	<20
23	<5	<5	<5	<5	<5	<5	<5	<20
24	<5	<5	<5	<5	<5	<5	<5	<20
25	<5	<5	<5	<5	<5	<5	<5	<20
26	<5	<5	<5	<5	<5	<5	<5	<20
27	<5	<5	<5	<5	<5	<5	<5	<20
28	<5	<5	<5	<5	<5	<5	<5	<20
29	<5	<5	<5	<5	<5	<5	<5	<20
30	<5	<5	<5	<5	<5	<5	<5	<20
31	<5	<5	<5	<5	<5	<5	<5	<20
32	<5	<5	<5	<5	<5	<5	<5	<20
33	<5	<5	<5	<5	<5	<5	<5	<20
34	<5	<5	<5	<5	<5	<5	<5	<20



# CMA Testing and Certification Laboratories

廠商會檢定中心

## TEST REPORT

Report No : AY0054957(8)

Date: 04 Nov 2019

Application No : LY032496(2)

Test Result :

VI. ASTM F963-17

### c. Heavy Elements Test

Clause                      Title/Description

4.3.5.2 (2)(b)              Toy substrate materials, soluble heavy elements

Test Method : Soluble heavy elements were conducted in accordance with clause 8.3 of ASTM F963-17

	<u>Test Item</u>							
	As	Hg	Se	Cd	Sb	Pb	Cr	Ba
Maximum Permissible Level (ppm)	25	60	500	75	60	90	60	1000
Sample								
35	<5	<5	<5	<5	<5	<5	<5	<20
36	<5	<5	<5	<5	<5	<5	<5	<20
37	<5	<5	<5	<5	<5	<5	<5	<20
38	<5	<5	<5	<5	<5	<5	<5	<20
39	<5	<5	<5	<5	<5	<5	<5	<20
40	<5	<5	<5	<5	<5	<5	<5	<20

Note :

- All results are in ppm
- ppm denotes part per million by weight
- < denotes less than
- ≥ denotes greater than or equal to
- As = Arsenic; Hg = Mercury; Se = Selenium; Cd = Cadmium; Sb = Antimony; Pb = Lead; Cr = Chromium; Ba = Barium



# CMA Testing and Certification Laboratories

廠商會檢定中心

## TEST REPORT

Report No : AY0054957(8)

Date: 04 Nov 2019

Application No : LY032496(2)

Test Result :

VI. ASTM F963-17

### c. Heavy Elements Test

Clause                      Title/Description

4.3.5.2 (2)(b)              Toy substrate materials, soluble heavy elements

Sample	Description	Sample weight
12	Red plastic of red parts	≥100 mg
13	Blue plastic of blue parts	≥100 mg
14	Yellow plastic of yellow parts	≥100 mg
15	Green plastic of green parts	≥100 mg
16	Pink plastic of pink parts	≥100 mg
17	Sky blue plastic of sky blue parts	≥100 mg
18	Orange plastic of orange parts	≥100 mg
19	Lime plastic of lime parts	≥100 mg
20	White plastic of white parts	≥100 mg
21	Black plastic of black parts	≥100 mg
22	Brown plastic of brown parts	≥100 mg
23	Gray plastic of gray parts	≥100 mg
24	Clear plastic of clear parts	≥100 mg
25	Clear red plastic of clear red parts	≥100 mg
26	Clear blue plastic of clear blue parts	≥100 mg
27	Clear yellow plastic of clear yellow parts	≥100 mg
28	Greyish blue plastic of large wheel	≥100 mg
29	Bright black plastic of shaft, long shaft, mini shaft	≥100 mg
30	Dull white plastic of inner part of middle size wheel, mini wheel	≥100 mg
31	Black soft plastic of tire of middle size wheel, mini wheel	≥100 mg
32	Dull white plastic of headband	≥100 mg
33	Blue plastic of blue box	≥100 mg
34	Orange plastic of orange box	≥100 mg
35	Red plastic of red box	≥100 mg
36	Pink plastic of pink box	≥100 mg
37	Lime plastic of lime box	≥100 mg
38	Clear sky blue plastic of cover of small box, large box	≥100 mg
39	Dull white plastic of locks of small box, large box	≥100 mg
40	Clear plastic of body of small box, large box	≥100 mg



# CMA Testing and Certification Laboratories

廠商會檢定中心

## TEST REPORT

Report No : AY0054957(8)

Date: 04 Nov 2019

Application No : LY032496(2)

Test Result :

VII. Lead content in accordance with U.S. Consumer Product Safety Improvement Act of 2008  
- Sec. 101 : Children's Products Containing Lead; Lead Paint Rule.

Test Method : Acid digestion followed by Atomic Absorption Spectrophotometry and/or  
Inductively Coupled Plasma Spectrometry (ICP-OES) analysis.

### For materials and substrate

	<u>Test Item</u>
	Total Lead
Permissible Limit (mg/kg)	100(*)
Sample	
#1	<15
#2	<15
#3	<15
#4	<15
#5	<15
#6	<15
#7	<15
#8	<15
#9	<15
#10	<15
#11	<15

Note :

- (\*) 100 ppm limit applies to product produced on or after 14 Aug 2011
- All results are in mg/kg
- < denotes less than
- # denotes composite sample. The results for composite sample are calculated based on the component with the least weight.





# CMA Testing and Certification Laboratories

廠商會檢定中心

## TEST REPORT

Report No : AY0054957(8)

Date: 04 Nov 2019

Application No : LY032496(2)

Test Result :

VII. Lead content in accordance with U.S. Consumer Product Safety Improvement Act of 2008  
- Sec. 101 : Children's Products Containing Lead; Lead Paint Rule.

Sample	Description
#1	Red plastic of red parts + Blue plastic of blue parts + Yellow plastic of yellow parts
#2	Green plastic of green parts + Pink plastic of pink parts + Sky blue plastic of sky blue parts
#3	Orange plastic of orange parts + Lime plastic of lime parts + White plastic of white parts
#4	Black plastic of black parts + Brown plastic of brown parts + Gray plastic of gray parts
#5	Clear plastic of clear parts + Clear red plastic of clear red parts + Clear blue plastic of clear blue parts
#6	Clear yellow plastic of clear yellow parts + Greyish blue plastic of large wheel + Bright black plastic of shaft, long shaft, mini shaft
#7	Dull white plastic of inner part of middle size wheel, mini wheel + Black soft plastic of tire of middle size wheel, mini wheel
#8	Dull white plastic of headband + Blue plastic of blue box
#9	Orange plastic of orange box + Red plastic of red box
#10	Pink plastic of pink box + Lime plastic of lime box
#11	Clear sky blue plastic of cover of small box, large box + Dull white plastic of locks of small box, large box + Clear plastic of body of small box, large box



# CMA Testing and Certification Laboratories

廠商會檢定中心

## TEST REPORT

Report No : AY0054957(8)

Date: 04 Nov 2019

Application No : LY032496(2)

Test Result :

VIII. 16 CFR Part 1307 - Prohibition of Children Toys and Child Care Articles Containing Specified Phthalates

Test Method : Phthalate analysis was determined by Gas Chromatography.

	Test Item							
	DEHP	DBP	BBP	DINP	DIBP	DPENP	DHEXP	DCHP
Maximum Limit	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Sample								
#1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
#2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
#3	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
#4	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
#5	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
#6	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
#7	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
#8	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
#9	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
#10	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
#11	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

- Note :
- All results are in % w/w
  - % w/w denotes percentage by weight
  - < denotes less than
  - # denotes composite sample. The results for composite sample are calculated based on the component with the least weight.
  - DEHP = Di (2-ethylhexyl) Phthalate; DBP = Dibutyl Phthalate; BBP = Butyl Benzyl Phthalate; DINP = Diisononyl Phthalate; DIBP = diisobutyl phthalate; DPENP = di-n-pentyl phthalate; DHEXP = di-n-hexyl phthalate ; DCHP = dicyclohexyl phthalate



# CMA Testing and Certification Laboratories

廠商會檢定中心

## TEST REPORT

Report No : AY0054957(8)

Date: 04 Nov 2019

Application No : LY032496(2)

Test Result :

### VIII. 16 CFR Part 1307 - Prohibition of Children Toys and Child Care Articles Containing Specified Phthalates

Sample	Description
#1	Red plastic of red parts + Blue plastic of blue parts + Yellow plastic of yellow parts
#2	Green plastic of green parts + Pink plastic of pink parts + Sky blue plastic of sky blue parts
#3	Orange plastic of orange parts + Lime plastic of lime parts + White plastic of white parts
#4	Black plastic of black parts + Brown plastic of brown parts + Gray plastic of gray parts
#5	Clear plastic of clear parts + Clear red plastic of clear red parts + Clear blue plastic of clear blue parts
#6	Clear yellow plastic of clear yellow parts + Greyish blue plastic of large wheel + Bright black plastic of shaft, long shaft, mini shaft
#7	Dull white plastic of inner part of middle size wheel, mini wheel + Black soft plastic of tire of middle size wheel, mini wheel
#8	Dull white plastic of headband + Blue plastic of blue box
#9	Orange plastic of orange box + Red plastic of red box
#10	Pink plastic of pink box + Lime plastic of lime box
#11	Clear sky blue plastic of cover of small box, large box + Dull white plastic of locks of small box, large box + Clear plastic of body of small box, large box





# CMA Testing and Certification Laboratories

廠商會檢定中心

## TEST REPORT

Report No : AY0054957(8)

Date: 04 Nov 2019

Application No : LY032496(2)

### Appendix



**LaQ RED No.1-7**



**LaQ BLUE No.1-7**



**LaQ YELLOW No.1-7**



**LaQ GREEN No.1-7**



**LaQ PINK No.1-7**



**LaQ SKY BLUE No.1-7**





# CMA Testing and Certification Laboratories

廠商會檢定中心

## TEST REPORT

Report No : AY0054957(8)

Date: 04 Nov 2019

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### Appendix



**LaQ ORANGE No.1-7**



**LaQ LIME No.1-7**



**LaQ WHITE No.1-7**



**LaQ BLACK No.1-7**



**LaQ BROWN No.1-7**



**LaQ GRAY No.1-7**



# CMA Testing and Certification Laboratories

廠商會檢定中心

## TEST REPORT

Report No : AY0054957(8)

Date: 04 Nov 2019

Application No : LY032496(2)

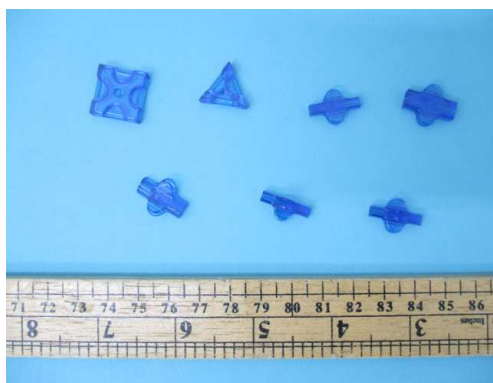
### Appendix



**LaQ CLEAR No.1-7**



**LaQ CLEAR RED No.1-7**



**LaQ CLEAR BLUE No.1-7**



**LaQ CLEAR YELLOW No.1-7**



**LaQ HAMACRON CONSTRUCTOR  
WHEEL**



**LaQ HAMACRON CONSTRUCTOR  
SHAFT**





# CMA Testing and Certification Laboratories

廠商會檢定中心

## TEST REPORT

Report No : AY0054957(8)

Date: 04 Nov 2019

Application No : LY032496(2)

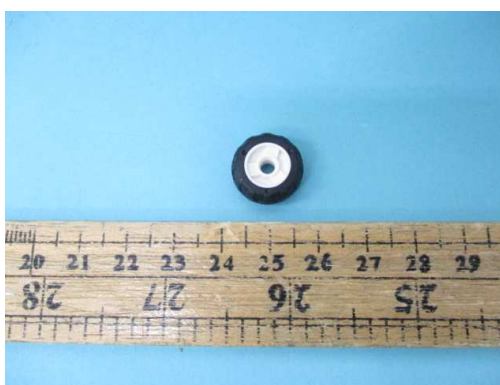
### Appendix



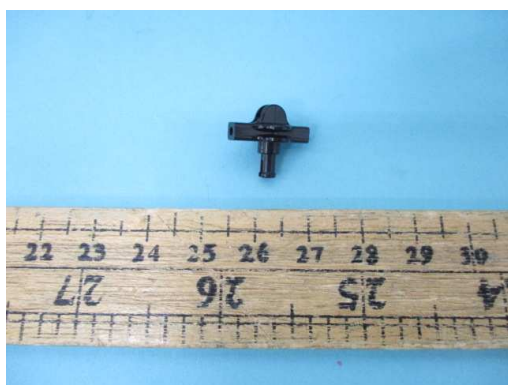
**LaQ HAMACRON CONSTRUCTOR MIDDLE SIZE WHEEL**



**LaQ HAMACRON CONSTRUCTOR  
LONG SHAFT**



**LaQ HAMACRON CONSTRUCTOR  
MINI WHEEL**



**LaQ HAMACRON CONSTRUCTOR  
MINI SHAFT**



**LaQ SWEET COLLECTION  
HEADBAND**



# CMA Testing and Certification Laboratories

廠商會檢定中心

## TEST REPORT

Report No : AY0054957(8)

Date: 04 Nov 2019

Application No : LY032496(2)

### Appendix



**Blister Case ORANGE**



**Blister Case RED**



**Blister Case BLUE**





# CMA Testing and Certification Laboratories

廠商會檢定中心

## TEST REPORT

Report No : AY0054957(8)

Date: 04 Nov 2019

Application No : LY032496(2)

### Appendix



**Blister Case PINK**



**Blister Case LIME**



**Plastic Container (Small)**



**Plastic Container (Large)**



# CMA Testing and Certification Laboratories

廠商會檢定中心

## TEST REPORT

Report No : AY0054957(8)

Date: 04 Nov 2019

Application No : LY032496(2)

### Appendix



(A)



# CMA Testing and Certification Laboratories

廠商會檢定中心

## TEST REPORT

Report No : AY0054957(8)

Date: 04 Nov 2019

Application No : LY032496(2)

### Appendix



(B)





# CMA Testing and Certification Laboratories

廠商會檢定中心

## TEST REPORT

Report No : AY0054957(8)

Date: 04 Nov 2019

Application No : LY032496(2)

### Appendix



(C)





# CMA Testing and Certification Laboratories

廠商會檢定中心

## TEST REPORT

Report No : AY0054957(8)

Date: 04 Nov 2019

Application No : LY032496(2)

### Appendix



(D)



# CMA Testing and Certification Laboratories

廠商會檢定中心

## TEST REPORT

Report No : AY0054957(8)

Date: 04 Nov 2019

Application No : LY032496(2)

### Appendix



(E)

\*\*\*\*\* End of Report \*\*\*\*\*