



Test Report

Date : 2024-10-29

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No. : HP24100415

Applicant : Yoshiritsu Co., Ltd.
1563 Koshibe, Oyodo Yoshino, Nara 638-0803 Japan

Attn: Akie Kawai

Description of Samples : Four styles of submitted sample each in two sets said to be :
(A) LAQ HAMACRON CONSTRUCTOR LOCOMOTIVE
JAN Code: 4952907009029
(B) LAQ BALL JOINT ROBOT SHADOW
JAN Code: 4952907008879
(C) LAQ LAQ DECORATION KITS SEASONS
JAN Code: 4952907008930
(D) LAQ BONUS SET 2024
JAN Code: 4952907008855

Labelled Age Grading : Item C, D: Age 5 years and up

: Item A, B: Age 7 years and up

Appropriate Age Grade : Age 5 years and up

Client's Requested Age Grading : Age 5 years and up


Tested Age Grade : Age 5 years and up

Country of Origin : Japan

Date Samples Received : 2024-10-14

Date Tested : 2024-10-14 to 2024-10-23

Description of Parts : **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


WONG Wing-cheung, Benny
Authorized Signatory



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Description of Samples : Name of Parts:
LaQ LAVENDER 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 JEWEL PINK No.1 and No.2
LaQ JEWEL AQUA No.1 and No.2
LaQ JEWEL EMERALD No.1 and No.2
LaQ CLEAR EMERALD No.1 and No.2
LaQ CLEAR PINK No.1 and No.2
LaQ CLEAR AQUA No.1 and No.2
LaQ CLEAR ORANGE No.1 and No.2
LaQ CLEAR LIME No.1 and No.2
LaQ CLEAR PURPLE No.1 and No.2
LaQ Parts Glow-in-the-dark parts No.1 and No.2
LaQ HEADBAND PART
LaQ HAMACRON CONSTRUCTOR WHEEL
LaQ HAMACRON CONSTRUCTOR SHAFT
LaQ HAMACRON CONTRSUCTOR MIDDLE SIZE WHEEL
LaQ HAMACRON CONSTRUCTOR LONG SHAFT
LaQ HAMACRON CONSTRUCTOR MINI WHEEL
LaQ HAMACRON CONSTRUCTOR MINI SHAFT
LaQ HAMACRON CONSTRUCTOR PULL BACK
LaQ BALL JOINT A and B
LaQ Hexa Joint Part
LaQ CROSS PART RED, YELLOW, WHITE, BLACK
LaQ PAX RED No.1 and No. 2
LaQ PAX YELLOW No.1 and No. 2
LaQ PAX BLUE No.1 and No. 2
LaQ PAX GREEN No.1 and No. 2
LaQ PARTS REMOVER
LaQ BLISTER CASE BLUE
LaQ BLISTER CASE PINK
LaQ PLASTIC CONTAINER (SMALL)
LaQ PLASTIC CONTAINER (LARGE)
LaQ CASE WHITE (SMALL)
LaQ CASE WHITE (LARGE)

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Test Requested		<u>Test Item</u>	<u>Result</u>
	I.	EN71 : Part 1 : 2014 + A1 : 2018 - Physical and Mechanical Properties	Passed
	II.	EN71 : Part 2 : 2020 - Flammability test	Passed
	III.	EN 71-3:2019+A1:2021 - 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.	European Regulation (EU) No. 1907/2006(REACH) Annex XVII Entry 51 & 52 and its amendment Commission Regulation (EU) 2018/2005 — Phthalate content.	Passed
	VI.	ASTM F963-23 - Physical and Mechanical Tests - Flammability Test - Heavy Elements Test (Clause 4.3.5) - Phthalates content	Passed Passed Passed 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.	Phthalates content as required by section 108, USA Consumer Product Safety Improvement Act and 16 CFR 1307 and 15 U.S. Code § 2057c.	Passed

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	<u>Test Item</u>	<u>Result</u>
Test Requested	: IX. Total lead content in accordance with California Proposition 65.	Passed
	X. Phthalates content in accordance with California Proposition 65.	Passed
Test Result	: Refer to the result pages for details.	

A handwritten signature in black ink, appearing to read 'Wong Wing-cheung'.

WONG Wing-cheung, Benny
Authorized Signatory



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Test Results :

I. EN71 : Part 1 : 2014 + A1 : 2018

<u>Applicable clause</u>	<u>Description</u>	<u>Result</u>
4	<u>General requirements</u>	
4.1	Material cleanliness	Pass
4.2	Assembly	Pass
4.7	Edges	Pass
4.8	Points and metallic wires	Pass
6	Packaging	Pass
7	<u>Warnings, markings and instructions for use</u>	*1
7.1	General	Pass
7.2	Toys not intended for children under 36 months	Pass

*1 = The manufacturer or his authorized representative or the importer into the community shall in a visible, easily legible and indelible form affix his name and/or trade name and/or mark and address on the toy or on its packaging.

Note: For numerical result with upper[lower] limit, compliance is deemed to occur if the measured result is under[above] the upper[lower] limit, even when extended upwards [downwards] by the expanded uncertainty with 95% coverage probability.

II. EN71 : Part 2 : 2020

<u>Applicable clause</u>	<u>Title/Description</u>	<u>Result</u>
4.1	General requirements	Pass

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

Note: For numerical result with upper[lower] limit, compliance is deemed to occur if the measured result is under[above] the upper[lower] limit, even when extended upwards [downwards] by the expanded uncertainty with 95% coverage probability.



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III. EN 71-3:2019+A1:2021

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 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)	28130	ND	ND	ND	ND	ND	ND
Antimony (Sb)	560	ND	ND	ND	ND	ND	ND
Arsenic (As)	47	ND	ND	ND	ND	ND	ND
Barium (Ba)	18,750	ND	ND	ND	ND	ND	ND
Boron (B)	15,000	ND	ND	ND	ND	ND	ND
Cadmium (Cd)	17	ND	ND	ND	ND	ND	ND
Chromium (III)	460	BL	BL	BL	BL	BL	BL
Chromium (VI)	0.053	BL	BL	BL	BL	BL	BL
Cobalt (Co)	130	ND	ND	ND	ND	ND	ND
Copper (Cu)	7,700	ND	ND	ND	ND	ND	ND
Lead (Pb)	23	ND	ND	ND	ND	ND	ND
Manganese (Mn)	15,000	ND	ND	ND	ND	ND	ND
Mercury (Hg)	94	ND	ND	ND	ND	ND	ND
Nickel (Ni)	930	ND	ND	ND	ND	ND	ND
Selenium (Se)	460	ND	ND	ND	ND	ND	ND
Strontium (Sr)	56,000	ND	ND	ND	ND	ND	ND
Tin (Sn)	180,000	ND	0.2	ND	ND	ND	ND
Organic tin [#]	12	ND	0.54	ND	ND	ND	ND
Zinc (Zn)	46,000	ND	ND	8	ND	ND	ND

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III. EN 71-3:2019+A1:2021

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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)	28130	ND	ND	ND	ND	ND	ND
Antimony (Sb)	560	ND	ND	ND	ND	ND	ND
Arsenic (As)	47	ND	ND	ND	ND	ND	ND
Barium (Ba)	18,750	ND	ND	ND	ND	ND	ND
Boron (B)	15,000	ND	ND	ND	ND	ND	ND
Cadmium (Cd)	17	ND	ND	ND	ND	ND	ND
Chromium (III)	460	BL	BL	BL	BL	BL	BL
Chromium (VI)	0.053	BL	BL	BL	BL	BL	BL
Cobalt (Co)	130	ND	ND	ND	ND	ND	ND
Copper (Cu)	7,700	ND	ND	ND	ND	ND	ND
Lead (Pb)	23	ND	ND	ND	ND	ND	ND
Manganese (Mn)	15,000	ND	ND	ND	ND	ND	ND
Mercury (Hg)	94	ND	ND	ND	ND	ND	ND
Nickel (Ni)	930	ND	ND	ND	ND	ND	ND
Selenium (Se)	460	ND	ND	ND	ND	ND	ND
Strontium (Sr)	56,000	ND	ND	ND	ND	ND	ND
Tin (Sn)	180,000	ND	ND	ND	ND	ND	ND
Organic tin [#]	12	ND	ND	ND	ND	ND	ND
Zinc (Zn)	46,000	ND	ND	ND	ND	ND	ND

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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 Gas Chromatography Mass Spectrometry (GCMS).

Category III – Scraped-off toy material

Element	Migration limit (mg/kg)	Result (mg/kg)					
		Sample					
		13	14	15	16	17	18
Aluminium (Al)	28130	ND	ND	ND	ND	ND	ND
Antimony (Sb)	560	ND	ND	ND	ND	ND	ND
Arsenic (As)	47	ND	ND	ND	ND	ND	ND
Barium (Ba)	18,750	ND	ND	ND	ND	ND	ND
Boron (B)	15,000	ND	ND	ND	ND	ND	ND
Cadmium (Cd)	17	ND	ND	ND	ND	ND	ND
Chromium (III)	460	BL	BL	BL	BL	BL	BL
Chromium (VI)	0.053	BL	BL	BL	BL	BL	BL
Cobalt (Co)	130	ND	ND	ND	ND	ND	ND
Copper (Cu)	7,700	ND	ND	ND	ND	ND	ND
Lead (Pb)	23	ND	ND	ND	ND	ND	ND
Manganese (Mn)	15,000	ND	ND	ND	ND	ND	ND
Mercury (Hg)	94	ND	ND	ND	ND	ND	ND
Nickel (Ni)	930	ND	ND	ND	ND	ND	ND
Selenium (Se)	460	ND	ND	ND	ND	ND	ND
Strontium (Sr)	56,000	ND	ND	ND	ND	ND	ND
Tin (Sn)	180,000	ND	ND	ND	ND	ND	ND
Organic tin [#]	12	ND	ND	ND	ND	ND	ND
Zinc (Zn)	46,000	ND	ND	ND	ND	ND	15

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Category III – Scraped-off toy material

Element	Migration limit (mg/kg)	Result (mg/kg)					
		Sample					
		19	20	21	22	23	24
Aluminium (Al)	28130	ND	ND	ND	ND	ND	ND
Antimony (Sb)	560	ND	ND	ND	ND	ND	ND
Arsenic (As)	47	ND	ND	ND	ND	ND	ND
Barium (Ba)	18,750	ND	ND	ND	ND	ND	ND
Boron (B)	15,000	ND	ND	ND	ND	ND	ND
Cadmium (Cd)	17	ND	ND	ND	ND	ND	ND
Chromium (III)	460	BL	BL	BL	BL	BL	BL
Chromium (VI)	0.053	BL	BL	BL	BL	BL	BL
Cobalt (Co)	130	ND	ND	ND	ND	ND	ND
Copper (Cu)	7,700	ND	ND	ND	ND	ND	ND
Lead (Pb)	23	ND	ND	ND	ND	ND	ND
Manganese (Mn)	15,000	ND	ND	ND	ND	ND	ND
Mercury (Hg)	94	ND	ND	ND	ND	ND	ND
Nickel (Ni)	930	ND	ND	ND	ND	ND	ND
Selenium (Se)	460	ND	ND	ND	ND	ND	ND
Strontium (Sr)	56,000	ND	ND	ND	ND	ND	ND
Tin (Sn)	180,000	ND	ND	ND	ND	ND	ND
Organic tin [#]	12	ND	ND	ND	ND	ND	ND
Zinc (Zn)	46,000	ND	ND	ND	ND	ND	ND

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Category III – Scraped-off toy material

Element	Migration limit (mg/kg)	Result (mg/kg)					
		Sample					
		25	26	27	28	29	30
Aluminium (Al)	28130	ND	ND	ND	ND	ND	ND
Antimony (Sb)	560	ND	ND	ND	ND	ND	ND
Arsenic (As)	47	ND	ND	ND	ND	ND	ND
Barium (Ba)	18,750	ND	ND	ND	ND	ND	ND
Boron (B)	15,000	ND	ND	ND	ND	ND	ND
Cadmium (Cd)	17	ND	ND	ND	ND	ND	ND
Chromium (III)	460	BL	BL	BL	BL	BL	BL
Chromium (VI)	0.053	BL	BL	BL	BL	BL	BL
Cobalt (Co)	130	ND	ND	ND	ND	ND	ND
Copper (Cu)	7,700	ND	ND	ND	ND	ND	ND
Lead (Pb)	23	ND	ND	ND	ND	ND	ND
Manganese (Mn)	15,000	ND	ND	ND	ND	ND	ND
Mercury (Hg)	94	ND	ND	ND	ND	ND	ND
Nickel (Ni)	930	ND	ND	ND	ND	ND	ND
Selenium (Se)	460	ND	ND	ND	ND	ND	ND
Strontium (Sr)	56,000	ND	ND	ND	ND	ND	ND
Tin (Sn)	180,000	ND	ND	ND	ND	ND	0.7
Organic tin [#]	12	ND	ND	ND	ND	ND	1.79
Zinc (Zn)	46,000	ND	ND	ND	ND	ND	ND

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Category III – Scraped-off toy material

Element	Migration limit (mg/kg)	Result (mg/kg)					
		Sample					
		31	32	33	34	35	36
Aluminium (Al)	28130	ND	ND	ND	ND	ND	ND
Antimony (Sb)	560	ND	ND	ND	ND	ND	ND
Arsenic (As)	47	ND	ND	ND	ND	ND	ND
Barium (Ba)	18,750	ND	ND	ND	ND	ND	ND
Boron (B)	15,000	ND	ND	ND	ND	ND	ND
Cadmium (Cd)	17	ND	ND	ND	ND	ND	ND
Chromium (III)	460	BL	BL	BL	BL	BL	BL
Chromium (VI)	0.053	BL	BL	BL	BL	BL	BL
Cobalt (Co)	130	ND	ND	ND	ND	ND	ND
Copper (Cu)	7,700	ND	ND	ND	ND	ND	ND
Lead (Pb)	23	ND	ND	ND	ND	ND	ND
Manganese (Mn)	15,000	ND	ND	ND	ND	ND	ND
Mercury (Hg)	94	ND	ND	ND	ND	ND	ND
Nickel (Ni)	930	ND	ND	ND	ND	ND	ND
Selenium (Se)	460	ND	ND	ND	ND	ND	ND
Strontium (Sr)	56,000	ND	ND	ND	ND	ND	ND
Tin (Sn)	180,000	ND	ND	0.2	ND	ND	ND
Organic tin [#]	12	ND	ND	0.50	ND	ND	ND
Zinc (Zn)	46,000	ND	ND	ND	ND	ND	ND

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Category III – Scraped-off toy material

Element	Migration limit (mg/kg)	Result (mg/kg)					
		Sample					
		37	38	39	40	41	42
Aluminium (Al)	28130	ND	ND	ND	ND	ND	624
Antimony (Sb)	560	ND	ND	ND	ND	ND	ND
Arsenic (As)	47	ND	ND	ND	ND	ND	ND
Barium (Ba)	18,750	ND	ND	ND	ND	ND	24
Boron (B)	15,000	ND	ND	ND	ND	ND	ND
Cadmium (Cd)	17	ND	ND	0.086	ND	ND	0.985
Chromium (III)	460	BL	BL	0.086	BL	BL	0.985
Chromium (VI)	0.053	BL	BL	ND	BL	BL	ND
Cobalt (Co)	130	ND	ND	ND	ND	ND	11
Copper (Cu)	7,700	ND	ND	ND	ND	ND	ND
Lead (Pb)	23	ND	ND	ND	ND	ND	ND
Manganese (Mn)	15,000	ND	ND	7	ND	ND	47
Mercury (Hg)	94	ND	ND	ND	ND	ND	ND
Nickel (Ni)	930	ND	ND	ND	ND	ND	ND
Selenium (Se)	460	ND	ND	ND	ND	ND	ND
Strontium (Sr)	56,000	ND	ND	44	ND	ND	158
Tin (Sn)	180,000	ND	ND	ND	ND	ND	ND
Organic tin [#]	12	ND	ND	ND	ND	ND	ND
Zinc (Zn)	46,000	ND	ND	ND	ND	ND	8

- 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.
 - ND = Not detected
 - BL = Below Limit

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For specification with upper limit, compliance is deemed to occur if the measured result is under the limit, even extended upwards by the expanded uncertainty with 95% coverage probability.

III. EN 71-3:2019+A1:2021

Category III – Scraped-off toy material

Sample	Description	Sample weight
1	Parts : red ABS	≥ 100 mg
2	Parts : blue ABS	≥ 100 mg
3	Parts : pink ABS	≥ 100 mg
4	Parts : orange ABS	≥ 100 mg
5	Parts : white ABS	≥ 100 mg
6	Parts : gray ABS	≥ 100 mg
7	Parts : lavender ABS	≥ 100 mg
8	Parts : red POM	≥ 100 mg
9	Parts : blue POM	≥ 100 mg
10	Parts : green POM	≥ 100 mg
11	Parts : pink POM	≥ 100 mg
12	Parts : sky blue POM	≥ 100 mg
13	Parts : brown POM	≥ 100 mg
14	Parts : white POM	≥ 100 mg
15	Parts : gray POM	≥ 100 mg
16	Parts : lavender POM	≥ 100 mg
17	Parts : clear red PMMA	≥ 100 mg
18	Parts : clear blue PMMA	≥ 100 mg
19	Parts : clear yellow PMMA	≥ 100 mg
20	Parts : clear PMMA	≥ 100 mg
21	Parts : clear orange PMMA	≥ 100 mg
22	Parts : clear lime PMMA	≥ 100 mg
23	Parts : clear purple PMMA	≥ 100 mg
24	Tire : black PE	≥ 100 mg
25* ²	Parts : yellow POM	≥ 100 mg
26* ²	Parts : lime POM	≥ 100 mg
27* ²	Center of wheel : white POM	≥ 100 mg
28* ²	Parts : black ABS	≥ 100 mg
29* ²	Parts : black POM	≥ 100 mg
30* ²	Parts : orange POM	≥ 100 mg
31* ²	Parts : sky blue ABS	≥ 100 mg
32* ²	Parts : yellow ABS	≥ 100 mg
33* ²	Parts : lime ABS	≥ 100 mg
34* ²	Parts : clear emerald PMMA	≥ 100 mg
35* ²	Parts : clear pink PMMA	≥ 100 mg

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III. EN 71-3:2019+A1:2021

Category III – Scraped-off toy material

Sample	Description	Sample weight
36*2	Parts : clear aqua PMMA	≥100 mg
37*2	Cover of container : white PP	≥100 mg
38*2	Container : translucent PP	≥100 mg
39*2	Instruction sheet : white paper	≥100 mg
40*2	Text of container cover : red coating	14 mg
41*2	Text of container cover : yellow coating	14 mg
42*2	Instruction sheet : red/blue/green/black multicolour coating	≥100 mg

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.

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). (in composite condition)

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

	Test item
	Total Cadmium
Maximum permissible level (mg/kg)	100
Sample	
1,2,3	<5
4,5,6	<5
7,8,9	<5
10,11,12	<5
13,14,15	<5
16,17,18	<5
19,20,21	<5
22,23,24	<5
25,26,27	<5
28,29,30	<5

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- 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). (in composite condition)

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

	Test item
	Total Cadmium
Maximum permissible level (mg/kg)	100
Sample	
31,32,33	<5
34,35,36	<5
37,38	<5
39	<5
40	<5
41	<5
42	<5

- Note :
- All results are in mg/kg
 - \leq denotes less than
 - # denotes composite sample. The results for composite sample are calculated based on the component with the least weight.
 - For specification with upper limit, compliance is deemed to occur if the measured result is under the limit, even extended upwards by the expanded uncertainty with 95% coverage probability.

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- 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.

Sample	Description
1	Parts : red ABS
2	Parts : blue ABS
3	Parts : pink ABS
4	Parts : orange ABS
5	Parts : white ABS
6	Parts : gray ABS
7	Parts : lavender ABS
8	Parts : red POM
9	Parts : blue POM
10	Parts : green POM
11	Parts : pink POM
12	Parts : sky blue POM
13	Parts : brown POM
14	Parts : white POM
15	Parts : gray POM
16	Parts : lavender POM
17	Parts : clear red PMMA
18	Parts : clear blue PMMA
19	Parts : clear yellow PMMA
20	Parts : clear PMMA
21	Parts : clear orange PMMA
22	Parts : clear lime PMMA
23	Parts : clear purple PMMA
24	Tire : black PE
25*2	Parts : yellow POM
26*2	Parts : lime POM
27*2	Center of wheel : white POM
28*2	Parts : black ABS
29*2	Parts : black POM
30*2	Parts : orange POM
31*2	Parts : sky blue ABS
32*2	Parts : yellow ABS
33*2	Parts : lime ABS
34*2	Parts : clear emerald PMMA
35*2	Parts : clear pink PMMA

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- 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.

Sample	Description
36*2	Parts : clear aqua PMMA
37*2	Cover of container : white PP
38*2	Container : translucent PP
39*2	Instruction sheet : white paper
40*2	Text of container cover : red coating
41*2	Text of container cover : yellow coating
42*2	Instruction sheet : red/blue/green/black multicolour coating

- V. European Regulation (EU) No. 1907/2006(REACH) Annex XVII Entry 51 & 52 and its amendment Commission Regulation (EU) 2018/2005 – Phthalate content.
(in composite condition)

Test Method: Phthalate analysis was determined by Gas Chromatography.

Sample	Phthalates content, %(w/w)						
	DBP	BBP	DEHP	DIBP	DNOP	DINP	DIDP
1,2,3	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
4,5,6	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
7,8,9	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
10,11,12	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
13,14,15	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
16,17,18	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
19,20,21	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
22,23,24	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
25,26,27	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
28,29,30	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
31,32,33	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
34,35,36	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
37,38	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Limit	Individually or in any combination of the DBP, BBP DEHP and DIBP shall not be equal to or greater than 0.1% by mass of the plasticised material.				The cumulative total of DNOP, DINP and DIDP shall not be greater than 0.1% by mass of the plasticised material.		

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Remark:

- DBP = Di-n-butyl phthalate
- BBP = Benzyl-n-butyl phthalate
- DEHP = Di (2-ethylhexyl) phthalate
- DIBP = Diisobutyl phthalate
- DNOP = Di-n-octyl phthalate
- DINP = Diisononyl phthalate
- DIDP = Diisodecyl phthalate
- %(w/w) = percentage weight per weight
- Method detection limit = 0.01%(w/w)
- The requirements of DNOP, DINP and DIDP are only applicable on tested material which can be placed in the mouth by children.
- For specification with upper limit, compliance is deemed to occur if the measured result is under the limit, even extended upwards by the expanded uncertainty with 95% coverage probability.

- 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

- 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	Description
1	Parts : red ABS
2	Parts : blue ABS
3	Parts : pink ABS
4	Parts : orange ABS
5	Parts : white ABS
6	Parts : gray ABS
7	Parts : lavender ABS
8	Parts : red POM
9	Parts : blue POM

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- 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	Description
10	Parts : green POM
11	Parts : pink POM
12	Parts : sky blue POM
13	Parts : brown POM
14	Parts : white POM
15	Parts : gray POM
16	Parts : lavender POM
17	Parts : clear red PMMA
18	Parts : clear blue PMMA
19	Parts : clear yellow PMMA
20	Parts : clear PMMA
21	Parts : clear orange PMMA
22	Parts : clear lime PMMA
23	Parts : clear purple PMMA
24	Tire : black PE
25*2	Parts : yellow POM
26*2	Parts : lime POM
27*2	Center of wheel : white POM
28*2	Parts : black ABS
29*2	Parts : black POM
30*2	Parts : orange POM
31*2	Parts : sky blue ABS
32*2	Parts : yellow ABS
33*2	Parts : lime ABS
34*2	Parts : clear emerald PMMA
35*2	Parts : clear pink PMMA
36*2	Parts : clear aqua PMMA
37*2	Cover of container : white PP
38*2	Container : translucent PP

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VI. ASTM F963-23

a. Physical and Mechanical Tests

<u>Applicable clause</u>	<u>Description</u>	<u>Result</u>
4.1	Material Quality – Visual Inspection	Pass
4.2	Flammability	Pass
4.3	Toxicology	Pass
4.6	Small objects	Pass
4.7	Accessible edges	Pass
	16 CFR 1500.49 Sharp metal or glass edges	
4.9	Accessible points	Pass
	16 CFR 1500.48 Sharp points	
4.12	Plastic film	Pass
5	<u>Labeling requirements</u>	
5.1	Federal; government requirements	Pass
5.2	Age grading labeling	Pass
5.3	Safety labeling requirements	Pass
5.11	Small objects, small balls, marbles and balloons	Pass
7	<u>Producer's markings</u>	
7.1	Producer's markings	Pass

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:

Note: For numerical result with upper[lower] limit, compliance is deemed to occur if the measured result is under[above] the upper[lower] limit, even when extended upwards [downwards] by the expanded uncertainty with 95% coverage probability.

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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

<u>Applicable</u> <u>clause</u>	<u>Description</u>	<u>Result</u>
4.2	Flammability Materials other than textiles (16 CFR 1500.3 (c) (6) (vi)) Test method : Annex A5 (16 CFR 1500.44)	Pass

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VI. ASTM F963-23

Heavy element

Ref.: ASTM F963-23 Section 4.3.5

Method: ASTM F963-23 Section 8.3

Determined by: Inductively Coupled Argon Plasma Atomic Emission Spectrophotometer

For materials and substrate

	Test Item
	Total Lead
Permissible Limit (ppm)	100
Sample	
1,2,3	<10
4,5,6	<10
7,8,9	<10
10,11,12	<10
13,14,15	<10
16,17,18	<10
19,20,21	<10
22,23,24	<10
25,26,27	<10
28,29,30	<10
31,32,33	<10
34,35,36	<10
37,38	<10

Note :

- 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.
- For specification with upper limit, compliance is deemed to occur if the measured result is under the limit, even extended upwards by the expanded uncertainty with 95% coverage probability.

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VI. ASTM F963-23

Heavy element

Ref.: ASTM F963-23 Section 4.3.5

Method: ASTM F963-23 Section 8.3

Determined by: Inductively Coupled Argon Plasma Atomic Emission Spectrophotometer

Sample	Description
1	Parts : red ABS
2	Parts : blue ABS
3	Parts : pink ABS
4	Parts : orange ABS
5	Parts : white ABS
6	Parts : gray ABS
7	Parts : lavender ABS
8	Parts : red POM
9	Parts : blue POM
10	Parts : green POM
11	Parts : pink POM
12	Parts : sky blue POM
13	Parts : brown POM
14	Parts : white POM
15	Parts : gray POM
16	Parts : lavender POM
17	Parts : clear red PMMA
18	Parts : clear blue PMMA
19	Parts : clear yellow PMMA
20	Parts : clear PMMA
21	Parts : clear orange PMMA
22	Parts : clear lime PMMA
23	Parts : clear purple PMMA
24	Tire : black PE
25*2	Parts : yellow POM
26*2	Parts : lime POM
27*2	Center of wheel : white POM
28*2	Parts : black ABS
29*2	Parts : black POM
30*2	Parts : orange POM
31*2	Parts : sky blue ABS
32*2	Parts : yellow ABS
33*2	Parts : lime ABS
34*2	Parts : clear emerald PMMA

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VI. ASTM F963-23

Heavy element

Ref.: ASTM F963-23 Section 4.3.5

Method: ASTM F963-23 Section 8.3

Determined by: Inductively Coupled Argon Plasma Atomic Emission Spectrophotometer

Sample	Description
35*2	Parts : clear pink PMMA
36*2	Parts : clear aqua PMMA
37*2	Cover of container : white PP
38*2	Container : translucent PP

VI. ASTM F963-23

Heavy element

Ref.: ASTM F963-23 Section 4.3.5

Method: ASTM F963-23 Section 8.3

Determined by: Inductively Coupled Argon Plasma Atomic Emission Spectrophotometer

For surface coating

	Test Item
	Total Lead
Permissible Limit (ppm)	90
Sample	
1	<10
2	<10
3	<10

Note :

- 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.
- For specification with upper limit, compliance is deemed to occur if the measured result is under the limit, even extended upwards by the expanded uncertainty with 95% coverage probability.

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VI. ASTM F963-23

Heavy element

Ref.: ASTM F963-23 Section 4.3.5

Method: ASTM F963-23 Section 8.3

Determined by: Inductively Coupled Argon Plasma Atomic Emission Spectrophotometer

Sample	Description
1* ²	Text of container cover : red coating
2* ²	Text of container cover : yellow coating
3* ²	Instruction sheet : red/blue/green/black multicolour coating

VI. ASTM F963-23

Heavy element

Ref.: ASTM F963-23 Section 4.3.5

Method: ASTM F963-23 Section 8.3

Determined by: Inductively Coupled Argon Plasma Atomic Emission Spectrophotometer

	Test Item							
	As	Hg	Se	Cd	Sb	Pb	Cr	Ba
Maximum Permissible Level (ppm)	25	60	500	75	60	90	60	1000
Sample								
1	<5	<5	<5	<5	<5	<5	<5	<20
2	<5	<5	<5	<5	<5	<5	<5	<20
3	<5	<5	<5	<5	<5	<5	<5	<20
4	<5	<5	<5	<5	<5	<5	<5	<20
5	<5	<5	<5	<5	<5	<5	<5	<20
6	<5	<5	<5	<5	<5	<5	<5	<20
7	<5	<5	<5	<5	<5	<5	<5	<20
8	<5	<5	<5	<5	<5	<5	<5	<20
9	<5	<5	<5	<5	<5	<5	<5	<20
10	<5	<5	<5	<5	<5	<5	<5	<20
11	<5	<5	<5	<5	<5	<5	<5	<20
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

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VI. ASTM F963-23

Heavy element

Ref.: ASTM F963-23 Section 4.3.5

Method: ASTM F963-23 Section 8.3

Determined by: Inductively Coupled Argon Plasma Atomic Emission Spectrophotometer

	Test Item							
	As	Hg	Se	Cd	Sb	Pb	Cr	Ba
Maximum Permissible Level (ppm)	25	60	500	75	60	90	60	1000
Sample								
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
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
41	<5	<5	<5	<5	<5	<5	<5	<20
42	<5	<5	<5	<5	<5	<5	<5	24

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- 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
 - For specification with upper limit, compliance is deemed to occur if the measured result is under the limit, even extended upwards by the expanded uncertainty with 95% coverage probability.

VI. ASTM F963-23

Heavy element

Ref.: ASTM F963-23 Section 4.3.5

Method: ASTM F963-23 Section 8.3

Determined by: Inductively Coupled Argon Plasma Atomic Emission Spectrophotometer

Sample	Description	Sample weight
1	Parts : red ABS	≥100 mg
2	Parts : blue ABS	≥100 mg
3	Parts : pink ABS	≥100 mg
4	Parts : orange ABS	≥100 mg
5	Parts : white ABS	≥100 mg
6	Parts : gray ABS	≥100 mg
7	Parts : lavender ABS	≥100 mg
8	Parts : red POM	≥100 mg
9	Parts : blue POM	≥100 mg
10	Parts : green POM	≥100 mg
11	Parts : pink POM	≥100 mg
12	Parts : sky blue POM	≥100 mg
13	Parts : brown POM	≥100 mg
14	Parts : white POM	≥100 mg
15	Parts : gray POM	≥100 mg
16	Parts : lavender POM	≥100 mg
17	Parts : clear red PMMA	≥100 mg
18	Parts : clear blue PMMA	≥100 mg
19	Parts : clear yellow PMMA	≥100 mg
20	Parts : clear PMMA	≥100 mg
21	Parts : clear orange PMMA	≥100 mg
22	Parts : clear lime PMMA	≥100 mg
23	Parts : clear purple PMMA	≥100 mg
24	Tire : black PE	≥100 mg

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VI. ASTM F963-23

Heavy element

Ref.: ASTM F963-23 Section 4.3.5

Method: ASTM F963-23 Section 8.3

Determined by: Inductively Coupled Argon Plasma Atomic Emission Spectrophotometer

Sample	Description	Sample weight
25*2	Parts : yellow POM	≥100 mg
26*2	Parts : lime POM	≥100 mg
27*2	Center of wheel : white POM	≥100 mg
28*2	Parts : black ABS	≥100 mg
29*2	Parts : black POM	≥100 mg
30*2	Parts : orange POM	≥100 mg
31*2	Parts : sky blue ABS	≥100 mg
32*2	Parts : yellow ABS	≥100 mg
33*2	Parts : lime ABS	≥100 mg
34*2	Parts : clear emerald PMMA	≥100 mg
35*2	Parts : clear pink PMMA	≥100 mg
36*2	Parts : clear aqua PMMA	≥100 mg
37*2	Cover of container : white PP	≥100 mg
38*2	Container : translucent PP	≥100 mg
39*2	Instruction sheet : white paper	≥100 mg
40*2	Text of container cover : red coating	14 mg
41*2	Text of container cover : yellow coating	14 mg
42*2	Instruction sheet : red/blue/green/black multicolour coating	≥100 mg

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VI. ASTM F963-23

Phthalates content (in composite condition)

Ref.: ASTM F963-23 Section 4.3.8, CPSIA Sec. 108 & 16 CFR 1307 and 15 U.S.

Code § 2057c.

Test method: CPSC-CH-C1001-09.4 by Gas Chromatography with Mass Selective Detector

Sample	Phthalates content, %(w/w)							
	DBP	BBP	DEHP	DINP	DHEXP	DIBP	DPENP	DCHP
1,2,3	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
4,5,6	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
7,8,9	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
10,11,12	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
13,14,15	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
16,17,18	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
19,20,21	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
22,23,24	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
25,26,27	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
28,29,30	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
31,32,33	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
34,35,36	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
37,38	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Limit	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Remark:

- DBP =Di-n-butyl phthalate
- BBP =Benzyl-n-butyl phthalate
- DEHP = Di (2-ethylhexyl) phthalate
- DINP = Diisononyl phthalate
- DHEXP =Di-n-hexyl phthalate
- DIBP =Diisobutyl phthalate
- DPENP =Di-n-pentyl phthalate
- DCHP =Dicyclohexyl phthalate
- %(w/w) =percentage weight per weight

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- For specification with upper limit, compliance is deemed to occur if the measured result is under the limit, even extended upwards by the expanded uncertainty with 95% coverage probability.

VI. ASTM F963-23

Phthalates content

Ref.: ASTM F963-23 Section 4.3.8, CPSIA Sec. 108 & 16 CFR 1307 and 15 U.S. Code § 2057c.

Test method: CPSC-CH-C1001-09.4 by Gas Chromatography with Mass Selective Detector

Sample	Description
1	Parts : red ABS
2	Parts : blue ABS
3	Parts : pink ABS
4	Parts : orange ABS
5	Parts : white ABS
6	Parts : gray ABS
7	Parts : lavender ABS
8	Parts : red POM
9	Parts : blue POM
10	Parts : green POM
11	Parts : pink POM
12	Parts : sky blue POM
13	Parts : brown POM
14	Parts : white POM
15	Parts : gray POM
16	Parts : lavender POM
17	Parts : clear red PMMA
18	Parts : clear blue PMMA
19	Parts : clear yellow PMMA
20	Parts : clear PMMA
21	Parts : clear orange PMMA
22	Parts : clear lime PMMA
23	Parts : clear purple PMMA
24	Tire : black PE
25*2	Parts : yellow POM
26*2	Parts : lime POM
27*2	Center of wheel : white POM
28*2	Parts : black ABS
29*2	Parts : black POM

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VI. ASTM F963-23

Phthalates content

Ref.: ASTM F963-23 Section 4.3.8, CPSIA Sec. 108 & 16 CFR 1307 and 15 U.S. Code § 2057c.

Test method: CPSC-CH-C1001-09.4 by Gas Chromatography with Mass Selective Detector

Sample	Description
30* ²	Parts : orange POM
31* ²	Parts : sky blue ABS
32* ²	Parts : yellow ABS
33* ²	Parts : lime ABS
34* ²	Parts : clear emerald PMMA
35* ²	Parts : clear pink PMMA
36* ²	Parts : clear aqua PMMA
37* ²	Cover of container : white PP
38* ²	Container : translucent PP

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- VII. Children's products containing lead - Total lead content in substrate
(in composite condition)
Ref.: CPSIA Sec 101(a) and 15 U.S. Code § 1278a.
Test method: Standard operation procedure for determining total lead (Pb) in non-metal children's products, CPSC-CH-E1002-08.3
Test method: Standard operation procedure for determining total lead (Pb) in metal children's products, CPSC-CH-E1001-08.3
Determined by: Inductively Coupled Argon Plasma Atomic Emission Spectrophotometer

For materials and substrate

	Test Item
	Total Lead
Permissible Limit (mg/kg)	100
Sample	
1,2,3	<10
4,5,6	<10
7,8,9	<10
10,11,12	<10
13,14,15	<10
16,17,18	<10
19,20,21	<10
22,23,24	<10
25,26,27	<10
28,29,30	<10
31,32,33	<10
34,35,36	<10
37,38	<10

- 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.
- For specification with upper limit, compliance is deemed to occur if the measured result is under the limit, even extended upwards by the expanded uncertainty with 95% coverage probability.

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- VII. Children's products containing lead - Total lead content in substrate
Ref.: CPSIA Sec 101(a) and 15 U.S. Code § 1278a.
Test method: Standard operation procedure for determining total lead (Pb) in non-metal children's products, CPSC-CH-E1002-08.3
Test method: Standard operation procedure for determining total lead (Pb) in metal children's products, CPSC-CH-E1001-08.3
Determined by: Inductively Coupled Argon Plasma Atomic Emission Spectrophotometer

Sample	Description
1	Parts : red ABS
2	Parts : blue ABS
3	Parts : pink ABS
4	Parts : orange ABS
5	Parts : white ABS
6	Parts : gray ABS
7	Parts : lavender ABS
8	Parts : red POM
9	Parts : blue POM
10	Parts : green POM
11	Parts : pink POM
12	Parts : sky blue POM
13	Parts : brown POM
14	Parts : white POM
15	Parts : gray POM
16	Parts : lavender POM
17	Parts : clear red PMMA
18	Parts : clear blue PMMA
19	Parts : clear yellow PMMA
20	Parts : clear PMMA
21	Parts : clear orange PMMA
22	Parts : clear lime PMMA
23	Parts : clear purple PMMA
24	Tire : black PE
25*2	Parts : yellow POM
26*2	Parts : lime POM
27*2	Center of wheel : white POM
28*2	Parts : black ABS
29*2	Parts : black POM
30*2	Parts : orange POM
31*2	Parts : sky blue ABS
32*2	Parts : yellow ABS
33*2	Parts : lime ABS

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- VII. Children's products containing lead - Total lead content in substrate
Ref.: CPSIA Sec 101(a) and 15 U.S. Code § 1278a.
Test method: Standard operation procedure for determining total lead (Pb) in non-metal children's products, CPSC-CH-E1002-08.3
Test method: Standard operation procedure for determining total lead (Pb) in metal children's products, CPSC-CH-E1001-08.3
Determined by: Inductively Coupled Argon Plasma Atomic Emission Spectrophotometer

Sample	Description
34*2	Parts : clear emerald PMMA
35*2	Parts : clear pink PMMA
36*2	Parts : clear aqua PMMA
37*2	Cover of container : white PP
38*2	Container : translucent PP

- VII. Children's products containing lead - Total lead content in paint and surface coating
Ref.: CPSIA Sec. 101 (f), 16 CFR 1303 and 15 U.S. Code § 1278a.
Test method: CPSC-CH-E 1003-09.1
Determined by: Inductively Coupled Argon Plasma Atomic Emission Spectrophotometer

	Test Item
	Total Lead
Permissible Limit (mg/kg)	90
Sample	
1	<10
2	<10
3	<10

- 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.
 - For specification with upper limit, compliance is deemed to occur if the measured result is under the limit, even extended upwards by the expanded uncertainty with 95% coverage probability.

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- VII. Children's products containing lead - Total lead content in paint and surface coating
Ref.: CPSIA Sec. 101 (f), 16 CFR 1303 and 15 U.S. Code § 1278a.
Test method: CPSC-CH-E 1003-09.1
Determined by: Inductively Coupled Argon Plasma Atomic Emission Spectrophotometer

Sample	Description
1* ²	Text of container cover : red coating
2* ²	Text of container cover : yellow coating
3* ²	Instruction sheet : red/blue/green/black multicolour coating

- VIII. Phthalates content (in composite condition)
Ref.: CPSIA Sec. 108 & 16 CFR 1307 and 15 U.S. Code § 2057c.
Test method: CPSC-CH-C1001-09.4 by Gas Chromatography with Mass Selective Detector

Sample No.	Phthalates content, %(w/w)									
	DBP	BBP	DEHP	DINP	DHEXP	DIBP	DPENP	DCHP	DNOP	DIDP
1,2,3	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
4,5,6	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
7,8,9	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
10,11,12	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
13,14,15	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
16,17,18	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
19,20,21	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
22,23,24	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
25,26,27	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
28,29,30	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
31,32,33	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
34,35,36	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
37,38	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Limit	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	See Note	

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Remark:

- DBP =Di-n-butyl phthalate
- BBP =Benzyl-n-butyl phthalate
- DEHP = Di (2-ethylhexyl) phthalate
- DNOP = Di-n-octyl phthalate
- DINP = Diisononyl phthalate
- DIDP = Diisodecyl phthalate
- DHEXP =Di-n-hexyl phthalate
- DIBP =Diisobutyl phthalate
- DPENP =Di-n-pentyl phthalate
- DCHP =Dicyclohexyl phthalate
- %(w/w) =percentage weight per weight

Note : The results of DNOP and DIDP are for reference only.

- 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
 - For specification with upper limit, compliance is deemed to occur if the measured result is under the limit, even extended upwards by the expanded uncertainty with 95% coverage probability.

VIII. Phthalates content

Ref.: CPSIA Sec. 108 & 16 CFR 1307 and 15 U.S. Code § 2057c.

Test method: CPSC-CH-C1001-09.4 by Gas Chromatography with Mass Selective Detector

Sample	Description
1	Parts : red ABS
2	Parts : blue ABS
3	Parts : pink ABS
4	Parts : orange ABS
5	Parts : white ABS
6	Parts : gray ABS
7	Parts : lavender ABS
8	Parts : red POM
9	Parts : blue POM
10	Parts : green POM
11	Parts : pink POM
12	Parts : sky blue POM
13	Parts : brown POM
14	Parts : white POM

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VIII. Phthalates content

Ref.: CPSIA Sec. 108 & 16 CFR 1307 and 15 U.S. Code § 2057c.

Test method: CPSC-CH-C1001-09.4 by Gas Chromatography with Mass Selective Detector

Sample	Description
15	Parts : gray POM
16	Parts : lavender POM
17	Parts : clear red PMMA
18	Parts : clear blue PMMA
19	Parts : clear yellow PMMA
20	Parts : clear PMMA
21	Parts : clear orange PMMA
22	Parts : clear lime PMMA
23	Parts : clear purple PMMA
24	Tire : black PE
25* ²	Parts : yellow POM
26* ²	Parts : lime POM
27* ²	Center of wheel : white POM
28* ²	Parts : black ABS
29* ²	Parts : black POM
30* ²	Parts : orange POM
31* ²	Parts : sky blue ABS
32* ²	Parts : yellow ABS
33* ²	Parts : lime ABS
34* ²	Parts : clear emerald PMMA
35* ²	Parts : clear pink PMMA
36* ²	Parts : clear aqua PMMA
37* ²	Cover of container : white PP
38* ²	Container : translucent PP

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IX. California Proposition 65: Lead content (in composite condition)

Ref.: Proposition 65 list of chemicals.

Determined by: Inductively Coupled Argon Plasma Atomic Emission Spectrophotometer

For materials and substrate

	Test Item
	Total Lead
Permissible Limit (mg/kg)	100
Sample	
1,2,3	<10
4,5,6	<10
7,8,9	<10
10,11,12	<10
13,14,15	<10
16,17,18	<10
19,20,21	<10
22,23,24	<10
25,26,27	<10
28,29,30	<10
31,32,33	<10
34,35,36	<10
37,38	<10

- 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.
 - For specification with upper limit, compliance is deemed to occur if the measured result is under the limit, even extended upwards by the expanded uncertainty with 95% coverage probability.

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IX. California Proposition 65: Lead content

Ref.: Proposition 65 list of chemicals.

Determined by: Inductively Coupled Argon Plasma Atomic Emission Spectrophotometer

Sample	Description
1	Parts : red ABS
2	Parts : blue ABS
3	Parts : pink ABS
4	Parts : orange ABS
5	Parts : white ABS
6	Parts : gray ABS
7	Parts : lavender ABS
8	Parts : red POM
9	Parts : blue POM
10	Parts : green POM
11	Parts : pink POM
12	Parts : sky blue POM
13	Parts : brown POM
14	Parts : white POM
15	Parts : gray POM
16	Parts : lavender POM
17	Parts : clear red PMMA
18	Parts : clear blue PMMA
19	Parts : clear yellow PMMA
20	Parts : clear PMMA
21	Parts : clear orange PMMA
22	Parts : clear lime PMMA
23	Parts : clear purple PMMA
24	Tire : black PE
25*2	Parts : yellow POM
26*2	Parts : lime POM
27*2	Center of wheel : white POM
28*2	Parts : black ABS
29*2	Parts : black POM
30*2	Parts : orange POM
31*2	Parts : sky blue ABS
32*2	Parts : yellow ABS
33*2	Parts : lime ABS
34*2	Parts : clear emerald PMMA
35*2	Parts : clear pink PMMA
36*2	Parts : clear aqua PMMA
37*2	Cover of container : white PP
38*2	Container : translucent PP

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IX. California Proposition 65: Lead content

Ref.: Proposition 65 list of chemicals.

Determined by: Inductively Coupled Argon Plasma Atomic Emission Spectrophotometer

For surface coating

	Test Item
	Total Lead
Permissible Limit (mg/kg)	90
Sample	
1	<10
2	<10
3	<10

- 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.
 - For specification with upper limit, compliance is deemed to occur if the measured result is under the limit, even extended upwards by the expanded uncertainty with 95% coverage probability.

IX. California Proposition 65: Lead content

Ref.: Proposition 65 list of chemicals.

Determined by: Inductively Coupled Argon Plasma Atomic Emission Spectrophotometer

Sample	Description
1*2	Text of container cover : red coating
2*2	Text of container cover : yellow coating
3*2	Instruction sheet : red/blue/green/black multicolour coating

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- X. California Proposition 65: Phthalates content (in composite condition)
Ref.: Proposition 65 list of chemicals.
Determined by: Gas Chromatography Mass Spectrometer

Sample No.	Phthalates content, %(w/w)					
	DBP	BBP	DEHP	DNHP	DINP	DIDP
1,2,3	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
4,5,6	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
7,8,9	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
10,11,12	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
13,14,15	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
16,17,18	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
19,20,21	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
22,23,24	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
25,26,27	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
28,29,30	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
31,32,33	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
34,35,36	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
37,38	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Limit	0.1	0.1	0.1	0.1	0.1	0.1

Remark:

- Method detection limit = 0.01%(w/w)
- %(w/w) =percentage weight per weigh
- The above limit was quoted from the requirement stated in Alameda Superior Court, BG-07-350969.
- DBP = Di-n-butyl phthalate
- BBP = Benzyl-n-butyl phthalate
- DEHP = Di (2-ethylhexyl) phthalate
- DNHP = Di-n-hexyl phthalate
- DINP = Diisononyl phthalate
- DIDP = Diisodecyl phthalate
- For specification with upper limit, compliance is deemed to occur if the measured result is under the limit, even extended upwards by the expanded uncertainty with 95% coverage probability.

- 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

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- For specification with upper limit, compliance is deemed to occur if the measured result is under the limit, even extended upwards by the expanded uncertainty with 95% coverage probability.

X. California Proposition 65: Phthalates content
Ref.: Proposition 65 list of chemicals.
Determined by: Gas Chromatography Mass Spectrometer

Sample	Description
1	Parts : red ABS
2	Parts : blue ABS
3	Parts : pink ABS
4	Parts : orange ABS
5	Parts : white ABS
6	Parts : gray ABS
7	Parts : lavender ABS
8	Parts : red POM
9	Parts : blue POM
10	Parts : green POM
11	Parts : pink POM
12	Parts : sky blue POM
13	Parts : brown POM
14	Parts : white POM
15	Parts : gray POM
16	Parts : lavender POM
17	Parts : clear red PMMA
18	Parts : clear blue PMMA
19	Parts : clear yellow PMMA
20	Parts : clear PMMA
21	Parts : clear orange PMMA
22	Parts : clear lime PMMA
23	Parts : clear purple PMMA
24	Tire : black PE
25*2	Parts : yellow POM
26*2	Parts : lime POM
27*2	Center of wheel : white POM
28*2	Parts : black ABS
29*2	Parts : black POM
30*2	Parts : orange POM
31*2	Parts : sky blue ABS
32*2	Parts : yellow ABS
33*2	Parts : lime ABS

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- X. California Proposition 65: Phthalates content
Ref.: Proposition 65 list of chemicals.
Determined by: Gas Chromatography Mass Spectrometer

Sample	Description
34*2	Parts : clear emerald PMMA
35*2	Parts : clear pink PMMA
36*2	Parts : clear aqua PMMA
37*2	Cover of container : white PP
38*2	Container : translucent PP

*2 = The test results were referred from our Test Report No. HP24060255 issued on 2024-06-20.

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Appendix for Photos of the Submitted Sample



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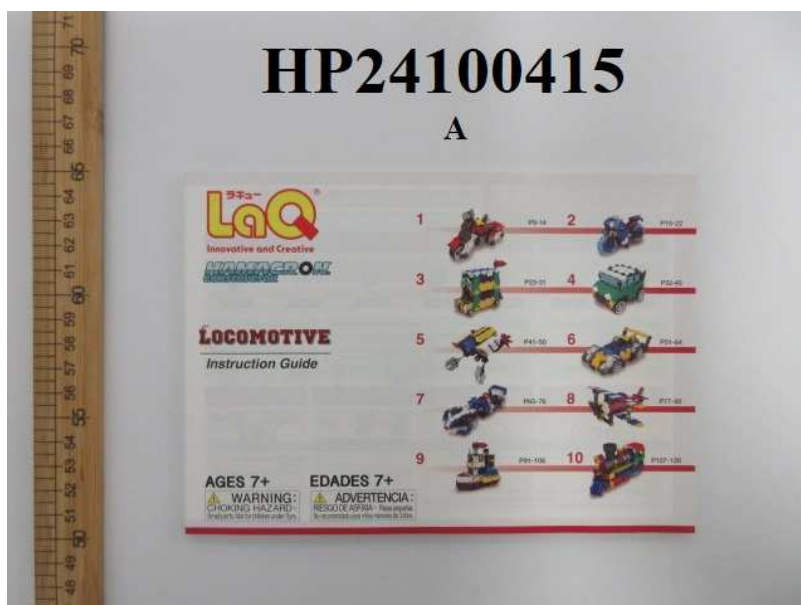
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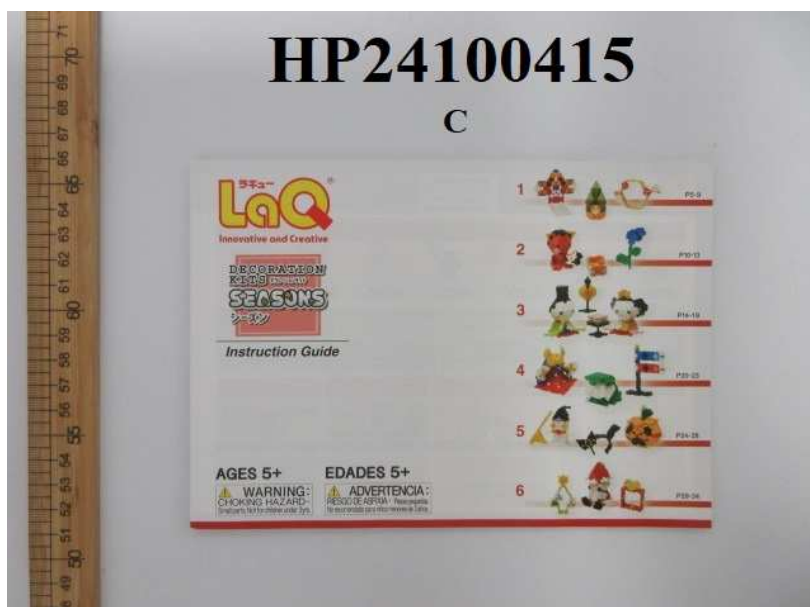
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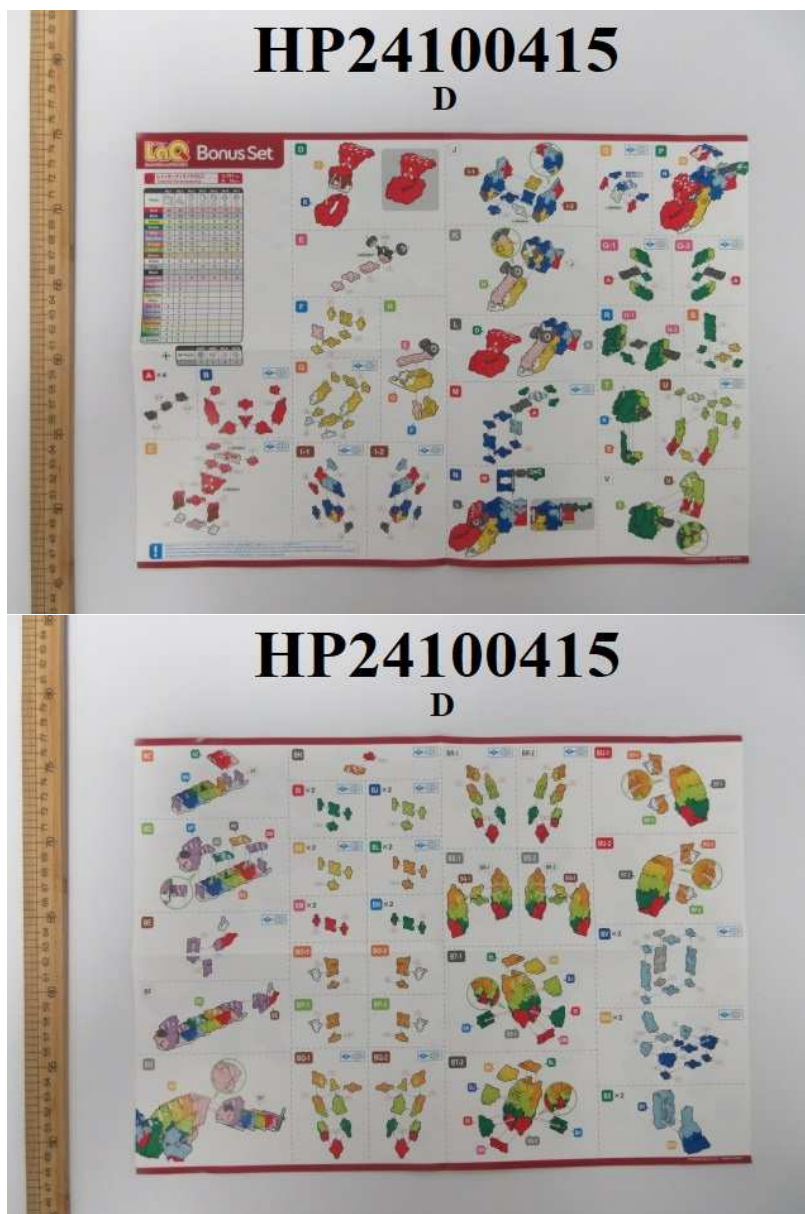
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