

**Test Report**

Number: GZHH00427388

Applicant: GUANGDONG EDUKIDDO INNOVATIVE AND  
EDUCATION TECHNOLOGY CO.,LTD.  
RIGHT OF GUANGYI STREET OFFICE NORTH OF  
GUANGYI DENG FENG ROAD, CHENG HAI DISTRICT,  
SHANTOU CITY, GUANGDONG, P.R. CHINA

Date: Nov 09, 2021

**Sample Description:**

Two (2) sets of submitted sample said to be :

Item Name : **Toy Series**  
Client Reference Information : E9997、A9997、E9998、A9998

Above sample information was submitted and/or identified by the client and it was not verified by laboratory.

Quantity : 4  
Labelled Age Group : "18M+" "36M+"  
Applicant Specified Age : Over 18 months (E9998)  
Grading for Testing : Over 36 months (E9997)  
Packaging Provided by Applicant : Yes  
Country of Origin : China  
Date Sample Received : Oct 27, 2021  
Testing Period : Oct 27, 2021 ~ Nov 05, 2021



Intertek authenticates the photo on original report only

**Tests conducted:**

As requested by the applicant, refer to attached page(s) for details.

To be continued



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Conclusion:

<u>Tested sample</u>	<u>Standard</u>	<u>Result</u>
Submitted sample sets	EN71-1:2014+A1:2018 for mechanical and physical properties	Pass
	EN 71-2: 2020 Flammability test	Pass
	BS EN71-1:2014+A1:2018 for mechanical and physical properties	Pass
	BS EN 71-2: 2020 Flammability test	Pass
Tested component(s) of submitted sample sets	EN 71-3:2019 on migration of certain elements and (EU) 2019/1922 amending 2009/48/EC (applies from 20 May 2021) for Aluminium migration	Pass
	EN 71-3:2019+A1:2021 on migration of certain elements	Pass#
	BS EN 71-3:2019 on migration of certain elements	Pass
	BS EN 71-3:2019+A1:2021 on migration of certain elements	Pass#

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Remark for E9997:

According to the laboratory, this item shall comply with the requirements of under 3 years. Nevertheless, the client requested the item to be tested for the requirements of over 3 years and had been tested as such per client's requirement

# : This test in the report is not in the CNAS accredited testing scope.

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Approved:




Parco Leung  
Technical Assistant Manager

Approved:



Echo Yang  
Technical Assistant Manager



**Test Report**

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Tests Conducted

1 Physical and Mechanical Tests

As per European Standard on Safety of toys EN71-1:2014+A1:2018

The submitted samples were undergone the following abuse tests:		
Test	Clause	Parameter
Torque test	8.3	0.34 Nm
Tension test	8.4.2.1	90N
Drop test	8.5	850 mm x 5 times
Impact test	8.7	1 kg
Compression test	8.8	110 N

Clause	Testing Items	Assessment
4	General requirements	
4.1	Material	P
4.2	Assembly	NA
4.3	Flexible plastic sheeting	NA
4.4	Toy bags	NA
4.5	Glass	NA
4.6	Expanding materials	NA
4.7	Edges	P
4.8	Points and metallic wires	P
4.9	Protruding parts	NA
4.10	Parts moving against each other	P
4.11	Mouth actuated toys and other toys intended to be put in the mouth	NA
4.12	Balloons	NA
4.13	Cords of toy kites and other flying toys	NA
4.14	Enclosures	NA
4.15	Toys intended to bear the mass of a child	NA
4.16	Heavy immobile toys	NA
4.17	Projectile toys	NA
4.18	Aquatic toys and inflatable toys	NA
4.19	Percussion caps specifically designed for use in toys and toys using percussion caps	NA
4.20	Acoustics	P
4.21	Toys containing non-electrical heat source	NA
4.22	Small balls	NA
4.23	Magnets	NA
4.24	Yo-yo balls	NA
4.25	Toys attached to food	NA
4.26	Toy disguise costumes	NA
4.27	Flying toys	NA
5	Toys intended for children under 36 months	
5.1	General requirements	P
5.2	Soft-filled toys and soft-filled parts of a toy	NA



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Clause	Testing Items	Assessment
5.3	Plastic sheeting	NA
5.4	Cords, chains and electrical cables in toys	NA
5.5	Liquid filled toys	NA
5.6	Speed limitation of electrically-driven ride-on toys	NA
5.7	Glass and porcelain	NA
5.8	Shape and size of certain toys	NA
5.9	Toys comprising monofilament fibres	NA
5.10	Small balls	NA
5.11	Play figures	NA
5.12	Hemispheric-shaped toys	NA
5.13	Suction cups	NA
5.14	Straps intended to be worn fully or partially around the neck	NA
5.15	Sledges with cords for pulling	NA
6	Packaging	P
7	Warnings, markings and instructions for use	
7.1	General	P
7.2	Toys not intended for children under 36 months	NA
7.3	Latex balloons	NA
7.4	Aquatic toys	NA
7.5	Functional toys	NA
7.6	Hazardous sharp functional edges and points	NA
7.7	Projectile toys	NA
7.8	Imitation protective masks and helmets	NA
7.9	Toy kites	NA
7.10	Roller skates, inlineskates and skateboards and certain other ride-on toys	NA
7.11	Toys intended to be attached to strung across a cradle, cot, or perambulator	NA
7.12	Liquid-filled teethingers	NA
7.13	Percussion caps specifically designed for use in toys	NA
7.14	Acoustics	NA
7.15	Toy bicycles	NA
7.16	Toys intended to bear the mass of a child	NA
7.17	Toys comprising monofilament fibres	NA
7.18	Toy scooters	NA
7.19	Rocking horses and similar toys	NA
7.20	Magnetic/electrical experimental sets	NA
7.21	Toys with electrical cables exceeding 300 mm in length	NA
7.22	Toys with cords or chains intended for children of 18 months and over but under 36 months	NA
7.23	Toys intended to be attached to a cradle, cot or perambulator	NA
7.24	Sledges with cords for pulling	NA
7.25	Flying toys	NA
7.26	Improvised projectiles	NA

Remark: P = Pass NA = Not Applicable

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Tests Conducted

Test data for clause 4.20		
Hand-held toys&Table-top or floor toys		
Item Name	Test results	
	LAeq(db)	Lcpeak(db)
Fire truck(music)	74	97.1
Ambulance	71	91.7
Fire truck(Ladder)	86.3	105.7
Frie truck(fire hydrant)	71.2	95

Remark: Additional information according to the Toy Safety Directives 2009/48/EC requirement. These information also appears as a note within the EN71 but are not standard requirements:

1. Marking

The manufacturer's and importer's name, registered trade name or registered trade mark, the address and the CE-marking shall be indicated on the toy or, where that is not possible, on its packaging or in a document accompany the toy. In addition, manufacturers shall ensure that their toys bear a type, batch, serial or model number or other element allowing their identification, or where the size or nature of the toy does not allow it, that the required information is provided on the packaging or in a document accompanying the toy.

	Toy	Packaging
Manufacturer's name	Present	Present
Manufacturer's address	Absent	Absent
Importer's name	Absent	Absent
Importer's address	Absent	Absent
Product identification code	Absent	Present
CE-marking	Absent	Present

2. Cleaning instruction for E9998

A toy intended for use by children under 36 months must be designed and manufactured in such a way that it can be cleaned. The toy shall fulfill the safety requirements also after having been cleaned in accordance with this point and the manufacturer's instructions. The manufacturer should, if applicable, provided instructions on how the toy has to be cleaned.

2 Flammability Test

Test Standard : European Standard on Safety of Toys EN 71 - 2: 2020

Clause	Testing Items	Assessment
4.1	General requirements	P
4.2	Toys to be worn on the head	NA
4.3	Toy disguise costumes and toys intended to be worn by a child in play	NA
4.4	Toys intended to be entered by a child	NA
4.5	Soft filled toys	NA

Remark: P = Pass NA = Not Applicable

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**Test Report**

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Tests Conducted

3 Physical and Mechanical Tests

As per British Standard on Safety of toys BS EN71-1:2014+A1:2018

Test	Clause	Parameter
Torque test	8.3	0.34 Nm
Tension test	8.4.2.1	90N
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Clause	Testing Items	Assessment
4	General requirements	
4.1	Material	P
4.2	Assembly	NA
4.3	Flexible plastic sheeting	NA
4.4	Toy bags	NA
4.5	Glass	NA
4.6	Expanding materials	NA
4.7	Edges	P
4.8	Points and metallic wires	P
4.9	Protruding parts	NA
4.10	Parts moving against each other	P
4.11	Mouth actuated toys and other toys intended to be put in the mouth	NA
4.12	Balloons	NA
4.13	Cords of toy kites and other flying toys	NA
4.14	Enclosures	NA
4.15	Toys intended to bear the mass of a child	NA
4.16	Heavy immobile toys	NA
4.17	Projectile toys	NA
4.18	Aquatic toys and inflatable toys	NA
4.19	Percussion caps specifically designed for use in toys and toys using percussion caps	NA
4.20	Acoustics	P
4.21	Toys containing non-electrical heat source	NA
4.22	Small balls	NA
4.23	Magnets	NA
4.24	Yo-yo balls	NA
4.25	Toys attached to food	NA
4.26	Toy disguise costumes	NA
4.27	Flying toys	NA
5	Toys intended for children under 36 months	



**Test Report**

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Tests Conducted

Clause	Testing Items	Assessment
5.1	General requirements	P
5.2	Soft-filled toys and soft-filled parts of a toy	NA
5.3	Plastic sheeting	NA
5.4	Cords, chains and electrical cables in toys	NA
5.5	Liquid filled toys	NA
5.6	Speed limitation of electrically-driven ride-on toys	NA
5.7	Glass and porcelain	NA
5.8	Shape and size of certain toys	NA
5.9	Toys comprising monofilament fibres	NA
5.10	Small balls	NA
5.11	Play figures	NA
5.12	Hemispheric-shaped toys	NA
5.13	Suction cups	NA
5.14	Straps intended to be worn fully or partially around the neck	NA
5.15	Sledges with cords for pulling	NA
6	Packaging	P
7	Warnings, markings and instructions for use	
7.1	General	P
7.2	Toys not intended for children under 36 months	NA
7.3	Latex balloons	NA
7.4	Aquatic toys	NA
7.5	Functional toys	NA
7.6	Hazardous sharp functional edges and points	NA
7.7	Projectile toys	NA
7.8	Imitation protective masks and helmets	NA
7.9	Toy kites	NA
7.10	Roller skates, inlineskates and skateboards and certain other ride-on toys	NA
7.11	Toys intended to be attached to strung across a cradle, cot, or perambulator	NA
7.12	Liquid-filled teethingers	NA
7.13	Percussion caps specifically designed for use in toys	NA
7.14	Acoustics	NA
7.15	Toy bicycles	NA
7.16	Toys intended to bear the mass of a child	NA
7.17	Toys comprising monofilament fibres	NA
7.18	Toy scooters	NA
7.19	Rocking horses and similar toys	NA
7.20	Magnetic/electrical experimental sets	NA
7.21	Toys with electrical cables exceeding 300 mm in length	NA
7.22	Toys with cords or chains intended for children of 18 months and over but under 36 months	NA



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Tests Conducted

Clause	Testing Items	Assessment
7.23	Toys intended to be attached to a cradle, cot or perambulator	NA
7.24	Sledges with cords for pulling	NA
7.25	Flying toys	NA
7.26	Improvised projectiles	NA

Remark: P = Pass NA = Not Applicable

Below is additional information checking according to the UK Toy (Safety) Regulations requirement.

**Marking**

The manufacturer's and importer's name, registered trade name or registered trademark, the address and type, batch, serial or model number or other element allowing their identification shall be indicated on the product itself.

After checking, it was found that

	Toy	Packaging
Name of authorised representative in Great Britain	Absent	Absent
Address of authorised representative in Great Britain	Absent	Absent
Product identification code	Absent	Present

With reference to the guidance of using UKCA marking from 1 January 2021 by the Department for Business, Energy and Industrial Strategy published on 1 September 2020.

After checking UKCA marking, it was found that

	Toy	Packaging
UKCA marking	Absent	Present

**2. Cleaning instruction for E9998**

A toy intended for use by children under 36 months must be designed and manufactured in such a way that it can be cleaned. The toy shall fulfill the safety requirements also after having been cleaned in accordance with this point and the manufacturer's instructions. The manufacturer should, if applicable, provided instructions on how the toy has to be cleaned.

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Tests Conducted

4 Flammability Test

Test Standard : British Standard on Safety of Toys BS EN 71 - 2: 2020

Clause	Testing Items	Assessment
4.1	General requirements	P
4.2	Toys to be worn on the head	NA
4.3	Toy disguise costumes and toys intended to be worn by a child in play	NA
4.4	Toys intended to be entered by a child	NA
4.5	Soft filled toys	NA

Remark: P = Pass NA = Not Applicable

5 19 Toxic Element Migration Test

(A) Test Result

As per EN 71-3:2019 and followed by Inductively Coupled Plasma Atomic Emission Spectrometry, Ion Chromatography with UV-VIS .

Category (III): Scraped-off toy material

Element	Result (mg/kg)				Detection Limit (mg/kg)	Limit (mg/kg)
	Tested Component					
	(10)	(16)	(17)	(18)		
Aluminium (Al)	ND	ND	ND	ND	300	28130
Antimony (Sb)	ND	ND	ND	ND	10	560
Arsenic (As)	ND	ND	ND	ND	10	47
Barium (Ba)	24	31	33	ND	10	18750
Boron (B)	ND	ND	ND	ND	50	15000
Cadmium (Cd)	ND	ND	ND	ND	5	17
Chromium (III) (Cr III) #	ND	ND	ND	ND	10	460
Chromium (VI) (Cr VI)	ND	ND	ND	ND	0.025	0.053
Cobalt (Co)	ND	ND	ND	ND	10	130
Copper (Cu)	ND	ND	ND	ND	10	7700
Lead (Pb)	ND	ND	ND	ND	10	23
Manganese (Mn)	ND	ND	ND	ND	10	15000
Mercury (Hg)	ND	ND	ND	ND	10	94
Nickel (Ni)	ND	ND	ND	ND	10	930
Selenium (Se)	ND	ND	ND	ND	10	460
Strontium (Sr)	ND	ND	ND	ND	100	56000
Tin (Sn)	ND	ND	ND	ND	2.5	180000
Organic tin **	ND	ND	ND	ND	5	12
Zinc (Zn)	ND	ND	ND	ND	100	46000

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Tests Conducted

Element	Result (mg/kg)	Detection Limit (mg/kg)	Limit (mg/kg)
	Tested Component		
	(7), (11)to(15), (19)to(28)		
Aluminium (Al)	ND	300	28130
Antimony (Sb)	ND	10	560
Arsenic (As)	ND	10	47
Barium (Ba)	ND	10	18750
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Nickel (Ni)	ND	10	930
Selenium (Se)	ND	10	460
Strontium (Sr)	ND	100	56000
Tin (Sn)	ND	2.5	180000
Organic tin **	ND	5	12
Zinc (Zn)	ND	100	46000

Remark : mg/kg = milligram per kilogram

++ = Unless the test results were marked with "Δ", Organic tin contents were not directly determined and were derived from migration results of total tin.

- Organic tin test result was expressed as tributyl tin.

ND = Not detected (less than detection limit)

# = The reported value of migration of Chromium (III) = migration value of total Chromium – migration value of Chromium(VI).

Tested component(s): See component list in the last section of this report

(B) Categories of various toy materials

Category I: Dry, brittle, powder like or pliable

Solid toy material from which powder-like material is released during playing and semi-solid materials that may also leave residues on the hands during play. The material can be ingested. Contamination of the hands with the material may contribute to the oral exposure of the material. (e.g. the cores of colouring pencils, chalk, crayons, modelling clays and plaster).

Category II: Liquid or sticky

Fluid or viscous toy material, which can be ingested or to which dermal exposure may occur during playing. (e.g. liquid paints, finger paints, liquid ink in pens, glue sticks, slimes, bubble solution).

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Tests Conducted

Category III: Scraped-off

Solid toy material with or without a coating, which can be ingested as a result of biting, tooth scraping, sucking or licking. (e.g. coatings, lacquers, plastics, paper, textiles, glass, ceramic, metallic, wooden, bone, leather and other materials).

6 19 Toxic Element Migration Test

(A) Test Result

As per EN 71-3:2019+A1:2021 and followed by Inductively Coupled Plasma Atomic Emission Spectrometry, Ion Chromatography with UV-VIS .

Category (III): Scraped-off toy material

Element	Result (mg/kg)				Detection Limit (mg/kg)	Limit (mg/kg)
	Tested Component					
	(10)	(16)	(17)	(18)		
Aluminium (Al)	ND	ND	ND	ND	300	28130
Antimony (Sb)	ND	ND	ND	ND	10	560
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Chromium (VI) (Cr VI)	ND	ND	ND	ND	0.025	0.053
Cobalt (Co)	ND	ND	ND	ND	10	130
Copper (Cu)	ND	ND	ND	ND	10	7700
Lead (Pb)	ND	ND	ND	ND	10	23
Manganese (Mn)	ND	ND	ND	ND	10	15000
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Zinc (Zn)	ND	ND	ND	ND	100	46000

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Tested component(s): See component list in the last section of this report

(B) Categories of various toy materials

Category I: Dry, brittle, powder like or pliable

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Category II: Liquid or sticky

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Category III: Scraped-off

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7 19 Toxic Element Migration Test

(A) Test Result

As per BS EN 71-3:2019 and followed by Inductively Coupled Plasma Atomic Emission Spectrometry, Ion Chromatography with UV-VIS .

Category (III): Scraped-off toy material

Element	Result (mg/kg)				Detection Limit (mg/kg)	Limit (mg/kg)
	Tested Component					
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Tested component(s): See component list in the last section of this report

(B) Categories of various toy materials

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8 19 Toxic Element Migration Test

(A) Test Result

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Category (III): Scraped-off toy material

Element	Result (mg/kg)				Detection Limit (mg/kg)	Limit (mg/kg)
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Chromium (III) (Cr III) #	ND	ND	ND	ND	10	460
Chromium (VI) (Cr VI)	ND	ND	ND	ND	0.025	0.053
Cobalt (Co)	ND	ND	ND	ND	10	130
Copper (Cu)	ND	ND	ND	ND	10	7700
Lead (Pb)	ND	ND	ND	ND	10	23
Manganese (Mn)	ND	ND	ND	ND	10	15000
Mercury (Hg)	ND	ND	ND	ND	10	94
Nickel (Ni)	ND	ND	ND	ND	10	930
Selenium (Se)	ND	ND	ND	ND	10	460
Strontium (Sr)	ND	ND	ND	ND	100	56000
Tin (Sn)	ND	ND	ND	ND	2.5	180000
Organic tin **	ND	ND	ND	ND	5	12
Zinc (Zn)	ND	ND	ND	ND	100	46000

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**Test Report**

Number: GZHH00427388

Tests Conducted

Element	Result (mg/kg)	Detection Limit (mg/kg)	Limit (mg/kg)
	Tested Component		
	(7), (11)to(15), (19)to(28)		
Aluminium (Al)	ND	300	28130
Antimony (Sb)	ND	10	560
Arsenic (As)	ND	10	47
Barium (Ba)	ND	10	18750
Boron (B)	ND	50	15000
Cadmium (Cd)	ND	5	17
Chromium (III) (Cr III) #	ND	10	460
Chromium (VI) (Cr VI)	ND	0.025	0.053
Cobalt (Co)	ND	10	130
Copper (Cu)	ND	10	7700
Lead (Pb)	ND	10	23
Manganese (Mn)	ND	10	15000
Mercury (Hg)	ND	10	94
Nickel (Ni)	ND	10	930
Selenium (Se)	ND	10	460
Strontium (Sr)	ND	100	56000
Tin (Sn)	ND	2.5	180000
Organic tin **	ND	5	12
Zinc (Zn)	ND	100	46000

Remark : mg/kg = milligram per kilogram  
 ++ = Unless the test results were marked with "Δ", Organic tin contents were not directly determined and were derived from migration results of total tin.  
 - Organic tin test result was expressed as tributyl tin.  
 ND = Not detected (less than detection limit)  
 # = The reported value of migration of Chromium (III) = migration value of total Chromium – migration value of Chromium(VI).

Tested component(s): See component list in the last section of this report

(B) Categories of various toy materials

Category I: Dry, brittle, powder like or pliable

Solid toy material from which powder-like material is released during playing and semi-solid materials that may also leave residues on the hands during play. The material can be ingested. Contamination of the hands with the material may contribute to the oral exposure of the material. (e.g. the cores of colouring pencils, chalk, crayons, modelling clays and plaster).

Category II: Liquid or sticky

Fluid or viscous toy material, which can be ingested or to which dermal exposure may occur during playing. (e.g. liquid paints, finger paints, liquid ink in pens, glue sticks, slimes, bubble solution).

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**Test Report**

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Tests Conducted

Category III: Scraped-off

Solid toy material with or without a coating, which can be ingested as a result of biting, tooth scraping, sucking or licking. (e.g. coatings, lacquers, plastics, paper, textiles, glass, ceramic, metallic, wooden, bone, leather and other materials).

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Component list :

- (1) @ Red coating on plastic (phone button of fire engine, surface of cap).
- (2) @ Blue coating on plastic (hose button of fire engine, tool drawing of ambulance).
- (3) @ Black coating on plastic (siren button of fire engine, scale of work drum).
- (4) @ White coating on plastic (letter of fire engine)
- (5) @ Coatings (red, yellow) on plastic (surface of fire extinguisher,).
- (6) @ Orange coating on plastic (handlamp of fire engine).
- (7) Coatings (red, bright yellow) on plastic (pattern of ambulance) (sample weight : 30.0 mg).
- (8) @ Deep blue coating on plastic (logo of ambulance).
- (9) @ Grey coating on plastic (surface of mouth mirror).
- (10) Navy plastic (headstock, tire of fire engine, body of fire extinguisher, patient, tire of ambulance).
- (11) Deep blue plastic (alarm bell of fire engine, ambulance).
- (12) Deep red plastic (body of fire extinguisher).
- (13) Dark red plastic (body of fire extinguisher, headstock, button of ambulance).
- (14) White plastic (body, wheels of fire engine, bottom of fire extinguisher, body of warning cone, fire hose, patient body, wheels of ambulance).
- (15) Grey plastic (elevator of fire engine).
- (16) Deep cyan plastic (adjuster of elevator, switch of fire engine, body of fire hose, body of driver of ambulance).
- (17) Yellow plastic (cap of driver, passenger, button of fire engine, body of fire hydrant, mouth mirror, ear mirror, bed).
- (18) Orange plastic (body of driver, passenger of fire engine, switch, button of ambulance, piston of work drum).
- (19) Bright orange plastic (body of warning cone, fire hydrant).
- (20) Light cyan plastic (nipples of work drum, body of ear mirror, mouth mirror, cap of driver)
- (21) Light orange plastic (cap of work drum, body of thermometer).
- (22) Flesh pink plastic (face of driver, passenger, patient).
- (23) Light plastic (battery cover of fire engine).
- (24) Sky blue plastic (bend wheel of both car).

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**Test Report**

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Tests Conducted

Component list :

- (25) Transparent soft plastic (bend wheel of both car).
- (26) Light green plastic (button of ambulance).
- (27) Transparent red plastic (baffle of ambulance).
- (28) White paper with multicolor coatings (sticker of ambulance).

@: Since the sample weight of the component was less than 10 mg, soluble heavy metal analysis was not applicable.

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End of report

*The statements of conformity reported have considered the decision rule agreed, namely that Intertek have taken account of measurement uncertainty as calculated by Intertek, and applied according to ILAC-G8/09:2019 (Non-binary acceptance based on guard band  $w = U$ ) except designation from the customer, regulation or test specification. This decision rule only applies to the numeric test results.*

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