



**CENTRE OF TESTING SERVICE
INTERNATIONAL**

OPERATE ACCORDING TO ISO/IEC 17025

TOY SAFETY TEST REPORT

TEST REPORT NUMBER : CGZ3170227-00115-T-D



CTS (Ningbo) Testing Service Technology Co., Ltd.
F1.1 & 8 West, Bldg. B, No. 66, Qingyi Rd., Hi-Tech Zone, Ningbo,
Zhejiang, China.



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Date: 14 Mar. 2017

TEST REPORT

Samples:	Plastic Beads (Opaque color)
Sample Description:	Plastic Beads (Opaque color)
Item No.:	Plastic Beads
Sample Quantity:	2 Sets
Date of Sample Received:	28 Feb. 2017
Test Address:	CTS (Ningbo) Testing Service Technology Co., Ltd. Fl.1 & 8 West, Bldg. B, No. 66, Qingyi Rd., Hi-Tech Zone, Ningbo, Zhejiang, China (EN71-1 and EN71-2 were tested by CTS (Guangzhou) Testing Service Technology Co., Ltd.)
Testing Period:	28 Feb. 2017 - 13 Mar. 2017
Test Requested:	EN 71-1: 2014 Safety of toys— Part 1: Mechanical and physical properties EN 71-2: 2011+A1:2014 Safety of toys —Part 2: Flammability EN 71-3: 2013+A1:2014 Safety of toys — Part 3: Migration of Certain Elements
Labeled Age Grading:	For ages 3 up
Test Age Grading:	For ages 3 up
Test Method:	As specified in the above standards
Test Results:	See the attachment in detail
Refer to the original report: CGZ3170227-00106-T	

Written by:

Reviewed by:

Approved by:

Date:

14 Mar. 2017

Date:

14 Mar. 2017

Date:

14 Mar. 2017



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Test Results:

(1) Mechanical and Physical Properties

As Specified in European Standard on Safety of Toys EN 71-1: 2014

EN 71-1: 2014			
Clause	Test Item	Remark	Verdict
4	General requirements		—
4.1	Material cleanliness (Visual examination)	No stain	P
4.2	Assembly	---	N
4.3	Flexible plastic sheeting	---	N
4.4	Toy bags	---	N
4.5	Glass	---	N
4.6	Expanding materials	---	N
4.7	Edges	---	P
4.8	Points and metallic wires	---	P
4.9	Protruding parts	---	N
4.10	Parts moving against each other	---	N
4.11	Mouth-actuated toys and other toys intended to be put in the mouth	---	N
4.12	Balloons	---	N
4.13	Cords of toy kites and other flying toys	---	N
4.14	Enclosures	---	N
4.15	Toys intended to bear the mass of a child	---	N
4.16	Heavy immobile toys	---	N
4.17	Projectiles	---	N
4.18	Aquatic toys and inflatable toys	---	N
4.19	Percussion caps specifically designed for use in toys and toys using percussion caps	---	N
4.20	Acoustics	---	N
4.21	Toys containing a non-electrical heat source	---	N
4.22	Small balls	---	N
4.23	Magnets	---	N
4.24	Yo-yo balls	---	N

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EN 71-1: 2014			
Clause	Test Item	Remark	Verdict
4.25	Toys attached to food	---	N
5	Toys intended for children under 36 months		---
5.1	General requirements	---	N
5.2	Soft-filled toys and soft-filled parts of a toy	---	N
5.3	Plastic sheeting	---	N
5.4	Cords, chains and electrical cables in toys	---	N
5.5	Liquid-filled toys	---	N
5.6	Speed limitation of electrically-driven ride-on toys	---	N
5.7	Glass and porcelain	---	N
5.8	Shape and size of certain toys	---	N
5.9	Toys comprising monofilament fibres	---	N
5.10	Small balls	---	N
5.11	Play figures	---	N
5.12	Hemispheric-shaped toys	---	N
5.13	Suction cups	---	N
5.14	Straps intended to be worn fully or partially around the neck	---	N
6	Packaging	---	N
7	Warnings, markings and instructions for use	---	---
7.1	General	---	P
7.2	Toys not intended for children under 36 months	---	P
7.3	Latex balloons	---	N
7.4	Aquatic toys	---	N
7.5	Functional toys	---	N
7.6	Hazardous sharp functional edges and points	---	N
7.7	Projectiles	---	N
7.8	Imitation projective masks and helmets	---	N

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EN 71-1: 2014			
Clause	Test Item	Remark	Verdict
7.9	Toy kites	---	N
7.10	Roller skates, inline skates, skateboards and certain other ride-on toys	---	N
7.11	Toys intended to be attached to or strung across a cradle, cot, or perambulator	---	N
7.12	Liquid-filled teethingers	---	N
7.13	Percussion caps specifically designed for use in toys	---	N
7.14	Acoustics	---	N
7.15	Toy bicycles	---	N
7.16	Toys intended to bear the mass of a child	---	N
7.17	Toys comprising monofilament fibres	---	N
7.18	Toy scooters	---	N
7.19	Rocking horses and similar toys	---	N
7.20	Magnetic/electrical experimental sets	---	N
7.21	Toys with electrical cables exceeding 300 mm in length	---	N
7.22	Toys with cords or chains intended for children of 18 months and over but under 36 months	---	N

Abbreviation : P = Pass ; N = Not Applicable

Note: All TEST RESULTS ARE ONLY VALID FOR THE SAMPLES BEING TESTED.

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TEST REPORT

(2) Flammability Test

As Specified in European Standard on Safety of Toys EN 71-2: 2011+A1:2014

EN 71-2: 2011+A1:2014			
Clause	Requirement – Test	Remark	Verdict
4	Requirements		—
4.1	General requirements	—	P
4.2	Toys to be worn on the head	—	N
4.3	Toy disguise costumes and toys intended to be worn by a child in play	—	N
4.4	Toys intended to be entered by a child	—	N
4.5	Soft-filled toys	—	N

Abbreviation : P = Pass ; N = Not Applicable

Note: All TEST RESULTS ARE ONLY VALID FOR THE SAMPLES BEING TESTED.

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(3) Migration of Certain Elements

With reference to EN 71-3:2013+A1:2014

a) Extractable Chromium (VI) – Analysis was performed by IC-UV/VIS.

b) Extractable Organic Tin – Analysis was performed by GC/MS.

c) All other elements – Analysis was performed by Inductively Coupled Argon Plasma –Atomic Emission Spectrometry.

Category III

Sample Description	No.1*	Black plastic beads / White plastic beads / Apricot plastic beads (mixed)			
	No.2*	Brown plastic beads / Yellow plastic beads / Orange plastic beads (mixed)			
	No.3	Red plastic beads / Pink plastic beads / Rose plastic beads (mixed)			
Element	Unit	Limit	Result		
			No.1*	No.2*	No.3
Extractable Aluminium (Al)	mg/kg	70,000	<50	<50	<50
Extractable Antimony (Sb)	mg/kg	560	<5	<5	<5
Extractable Arsenic (As)	mg/kg	47	<5	<5	<5
Extractable Barium (Ba)	mg/kg	18,750	<50	<50	159
Extractable Boron (B)	mg/kg	15,000	<50	<50	<50
Extractable Cadmium (Cd)	mg/kg	17	<3	<3	<3
Extractable Chromium (III) (Cr (III))	mg/kg	460	<5	<5	<5
Extractable Chromium (VI) (Cr (VI))	mg/kg	0.2	<0.2	<0.2	<0.2
Extractable Cobalt (Co)	mg/kg	130	<5	<5	<5
Extractable Copper (Cu)	mg/kg	7,700	<50	<50	<50
Extractable Lead (Pb)	mg/kg	160	<5	<5	<5
Extractable Manganese (Mn)	mg/kg	15,000	<50	<50	<50
Extractable Mercury (Hg)	mg/kg	94	<5	<5	<5
Extractable Nickel (Ni)	mg/kg	930	<5	<5	<5
Extractable Selenium (Se)	mg/kg	460	<5	<5	<5
Extractable Strontium (Sr)	mg/kg	56,000	<50	<50	<50
Extractable Tin (Sn)	mg/kg	180,000	<1	<1	<1
Extractable Organic Tin	mg/kg	12	<0.2	<0.2	<0.2
Extractable Zinc (Zn)	mg/kg	46,000	<50	<50	<50

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Sample Description	No.4*	Green plastic beads / Blue plastic beads (mixed)		
	No.5*	Blue plastic beads / Light blue plastic beads / Purple plastic beads (mixed)		
Element	Unit	Limit	Result	
			No.4*	No.5*
Extractable Aluminium (Al)	mg/kg	70,000	<50	<50
Extractable Antimony (Sb)	mg/kg	560	<5	<5
Extractable Arsenic (As)	mg/kg	47	<5	<5
Extractable Barium (Ba)	mg/kg	18,750	<50	<50
Extractable Boron (B)	mg/kg	15,000	<50	<50
Extractable Cadmium (Cd)	mg/kg	17	<3	<3
Extractable Chromium (III) (Cr (III))	mg/kg	460	<5	<5
Extractable Chromium (VI) (Cr (VI))	mg/kg	0.2	<0.2	<0.2
Extractable Cobalt (Co)	mg/kg	130	<5	<5
Extractable Copper (Cu)	mg/kg	7,700	<50	<50
Extractable Lead (Pb)	mg/kg	160	<5	<5
Extractable Manganese (Mn)	mg/kg	15,000	<50	<50
Extractable Mercury (Hg)	mg/kg	94	<5	<5
Extractable Nickel (Ni)	mg/kg	930	<5	<5
Extractable Selenium (Se)	mg/kg	460	<5	<5
Extractable Strontium (Sr)	mg/kg	56,000	<50	<50
Extractable Tin (Sn)	mg/kg	180,000	<1	<1
Extractable Organic Tin	mg/kg	12	<0.2	<0.2
Extractable Zinc (Zn)	mg/kg	46,000	<50	<50

- Note : 1. <= less than
 2. Unit: mg/kg = ppm
 3. 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

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dermal exposure may occur during playing. (e.g. liquid paints, finger paints, liquid ink in pens, glue sticks, slimes, bubble solution).

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).

- 4.* The samples was/were analyzed on behalf of the applicant as mixing sample in one testing. The above results was/were only given as the informality value.
5. The test results only apply to the materials requested by applicant.



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APPENDIX

PHOTO OF THE SUBMITTED SAMPLE(S)



External view

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Marking

end of report

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