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检测
TESTING
CNAS L6483



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Test Report

Report No.: DNT2410160157C2722-04419

Applicant: Guangzhou Moetch Cultural & Creative Co.,Ltd

Address: Room 102, No.38 South Road, Haizhu District, Guangzhou

The samples and sample information for the following tests are provided and confirmed by the applicant

Product description: Sanrio characters 24-Hour Restaurant Series Mini Box Max

Item No.: 24WH-015

Labeled Age Grading: 15+

Requested Age Grading: 3+

Tested Age Grading: 3+

Sample received date: Oct. 16, 2024, Oct. 30, 2024

Sample testing period: Oct. 16, 2024 to Oct. 31, 2024

Report issued date: Oct. 31, 2024

Test results: Please refer to next page(s).

Tested By: Jack Jack Zhang

Reviewed By: Tina Luo Tina Luo

Approved By: Boly Peng Boly Peng

Note: If there is any objection to the results in this report, please submit a written inquiry to the company within 15 days from the date of receiving the report. The test report is effective only with both signature and specialized stamp, and is issued by the company in accordance with the requirements of the "Conditions of Issuance of Test Reports" printed in the attached page. Unless otherwise stated, the results presented in this report only apply to the samples tested this time. Partial reproduction of this report is not allowed unless approved by the company in writing.

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**Result Summary :**

Test Requested	Conclusion
ASTM F963-23 Standard Consumer Safety Specification for Toy Safety - Mechanical and physical tests (except clause 4.25)	PASS
ASTM F963-23 Standard Consumer Safety Specification for Toy Safety - Flammability tests	PASS
ASTM F963-23 Standard Consumer Safety Specification for Toy Safety - Total Lead tests	PASS
ASTM F963-23 Standard Consumer Safety Specification for Toy Safety - Soluble element test	PASS
ASTM F963-23 Standard Consumer Safety Specification for Toy Safety - Phthalates tests	PASS
US 16 CFR 1500&1501 Physical and mechanical tests	PASS
US 16 CFR 1500.44 Flammability tests	PASS
US 16 CFR 1303 Lead content - Lead-containing paint	PASS
U.S. 15 U.S.C. 1278a - Children's products containing lead; lead paint rule (Consumer Product Safety Improvement Act (CPSIA) of 2008, sec.101)	PASS
U.S. 16 CFR 1307 - Prohibition of children's toys and child care articles containing specified phthalates (Consumer Product Safety Improvement Act (CPSIA) of 2008, sec.108)	PASS
California Proposition 65 - Total Lead Content	PASS
California Proposition 65 - Phthalates Content	PASS
US 15 U.S.C 2063a - Tracking labels for children's products	PASS
EN / BS EN 71-1:2014+A1:2018 Safety of toys - Part 1: Mechanical and Physical Properties	PASS
EN / BS EN 71-2:2020 Safety of toys - Part 2: Flammability	PASS
EN / BS EN 71-3:2019+A1:2021 Safety of toys - Part 3: Migration of certain elements	PASS
European regulation (EC) No. 1907/2006 (REACH) annex XVII entry 51 & 52 on phthalates content	PASS
European regulation (EC) No. 1907/2006 (REACH) annex XVII entry 50 on requirements of Polycyclic- aromatic hydrocarbons (PAHS) content	PASS
European regulation (EC) No. 1907/2006 (REACH) annex XVII entry 23 on requirements of Cadmium content	PASS

**Sample Description:**

No.	Description
A1	Sanrio characters 24-Hour Restaurant Series Mini Box Max
1	Multi-color coating (body coating & counter coating - Ice cream sweetheart My Melody)
2	Multi-color coating (body coating & cash register coating & desk coating - Check after dinner MY Sweet Piano)
3	Multi-color coating (body coating & beverage dispenser coating - Sparkling special drink Kuromi)
4	Multi-color coating (body coating & basket coating & dessert coating -Taste new products Cinnamoroll)
5	Multi-color coating (body coating & basket coating & dessert coating -Taste new products Cinnamoroll secret)
6	Multi-color coating (body coating & menu coating & table box coating -Vitality order Pompompurin)
7	Multi-color coating (body coating & bakery machine coating - Healing baking Hello Kitty)
8	Multi-color coating (body coating & octopus coating & billboard coating - Star welcome Hangyodon)
9	Multi-color coating (body coating & cabinet coating & bread coating - Surprise chat Pochacco)
10	Pink coating (dust proof box coating)(sample weight: 75.3mg)
11	Transparent plastic without coating (Counter baffle - My Melody, table leg -Pompompurin,cabinet - Pochacco,cover - dust proof box,baseboard)
12	White PVC without coating (body substrate-all styles,beverage dispenser -Kuromi,menu - Pompompurin, octopus & billboard - Hangyodon,cash register & desk - MY Sweet Piano,basket & dessert - Cinnamoroll,basket & dessert - Cinnamoroll secret,bakery machine - Hello Kitty,Counter base - My Melody,bread - Pochacco)
13	Transparent PVC without coating (glass - Kuromi,table board - Pompompurin)
14	Beige PVC without coating (dust proof)
15	Clear laminated multi-color printed white paper card (background)

Note:

1. Tested samples were specified by applicant.
2. Sample weight in bracket was for soluble test only.

**Result:****ASTM F963-23 Standard Consumer Safety Specification for Toy Safety**
Mechanical and Physical Tests

Clause	Description	Result
		A1
4	Safety requirements	
4.1	Material Quality	Pass
4.3.7	Stuffing Materials	N/A
4.4*	Electrical/Thermal Energy	N/A
4.5	Sound Producing Toys	N/A
4.6	Small Objects	Pass
4.6.1	Toys that are intended for children under 36 months	N/A
4.6.2	Mouth-Actuated Toys	N/A
4.6.3	Toys and games that are intended for use by children who are at least three years old (36 months) but less than six years of age (72 months)	Pass
4.7	Accessible Edges	Pass
4.8	Projections	Pass
4.9	Accessible Points	Pass
4.10	Wires or Rods	N/A
4.11	Nails and Fasteners	N/A
4.12	Plastic Film	N/A
4.13	Folding Mechanisms and Hinges	N/A
4.13.1	Folding Mechanisms	N/A
4.13.2	Hinge-Line Clearance	N/A
4.14	Cords and Elastics in Toys	N/A
4.15	Stability and Over-Load Requirements	N/A
4.16	Confined Spaces	N/A
4.17	Wheels, Tires, and Axles	N/A
4.18	Holes, Clearance, and Accessibility of Mechanisms	N/A
4.19	Simulated Protective Devices	N/A
4.20	Pacifiers	N/A
4.21	Projectile Toys	N/A
4.22	Teethers and Teething Toys	N/A
4.23	Rattles	N/A



4.24	Squeeze Toys	N/A
4.25	Battery-Operated Toys	N/R
4.25.1	The toy shall be marked permanently on the battery compartment or on the area immediately adjacent to the battery compartment to show the correct battery polarity using the polarity symbols “+” and “-”.	N/R
4.25.2	The maximum allowable direct current potential between any two accessible electrical points is 24 V nominal	N/R
4.25.3	Battery-operated toys shall be designed so that it is not possible to charge any non-rechargeable battery	N/R
4.25.4	Battery Accessibility	
4.25.4.1	For toys intended for children less than 3 years old, all batteries shall not be accessible	N/R
4.25.4.2	For all toys, batteries that fit completely within the small parts test cylinder shall not be accessible	N/R
4.25.4.3	If a fastener is used to secure the battery compartment, it shall remain attached to the toy or battery compartment cover, before and after testing in accordance with 8.5-8.10.	N/R
4.25.4.4	As an alternative to a common household tool, manufacturers are permitted to elect to use a specialty fastener (for example, Torx, Hex) to secure the battery compartment, in accordance with the requirements of 4.25.4, if the appropriate tool is included with the toy, and instructional material conforming to 6.9 is included.	N/R
4.25.5	Batteries of different types or capacities shall not be mixed within any single electrical circuit	N/R
4.25.6	The surfaces of the batteries shall not achieve temperatures exceeding 71°C	N/R
4.25.7	No condition shall occur that would cause the toy to fail the temperature requirements of 4.25.6 or present a combustion hazard as described in 4.25	N/R
4.25.8	Battery-operated toys shall meet the requirements of 6.5 for instructions on safe battery usage. Toys which use non-replaceable batteries as the only source of power are not subject to 6.5.	N/R
4.25.9*	Battery-Powered Ride-On Toys	N/R
4.25.10*	Toys that Contain Secondary Cells or Secondary Batteries:	N/R
4.26	Toys Intended to be Attached to a Crib or Playpen	N/A
4.27	Stuffed and Beanbag-Type Toys	N/A
4.28	Stroller and Carriage Toys	N/A
4.29	Art Materials	N/A
4.30	Toy Gun Marking	N/A
4.31	Balloons	N/A
4.32	Certain Toys with Nearly Spherical Ends	N/A
4.33	Marbles	N/A
4.34	Balls	N/A



4.35	Pompoms	N/A
4.36	Hemispheric-Shaped Objects	N/A
4.37*	Yo Yo Elastic Tether Toys	N/A
4.38	Magnets	N/A
4.39	Jaw Entrapment in Handles and Steering Wheels	N/A
4.40	Expanding Materials	N/A
4.41	Toy Chests	N/A
5	Labeling Requirements	Pass
6	Instructional Literature	Pass
6.1	Definition and description	Pass
6.2	Crib and playpen toys	N/A
6.3	Mobiles	N/A
6.4	Toys intended to be assembled by an adult	N/A
6.5	Battery-operated toys	Pass
6.6	Battery powered ride-on toys	N/A
6.7	Toys in contact with food	N/A
6.8	Toys chests	N/A
6.9	The instructional material for battery(ies) toys which require	N/A
7	Producer's Markings	Pass
7.1	Producer's markings	Pass
7.2	Battery-powered ride-on toys	N/A
7.3	Toys chests	N/A
8	Test Methods	
8.5	Normal Use Testing	Pass
8.6	Abuse Testing	Pass
8.7	Impact Test	Pass
8.8	Torque Test	Pass
8.9	Tension Test	Pass
8.10	Compression Test	N/A

Note:

1. N/A = Not Application
2. N/R = Not request

**Flammability tests**

Test Method: ASTM F963-23 Section 4.2 and Annex A5: Flammability Testing Procedure for Solids and Soft Toys

Sample	Burn rate (in/sec.)	Results
A1	DNI	Pass

Note:

- In accordance with the ASTM F963, the burning rate should not be greater than 0.1 inch per second.
- All styles of submitted samples were tested, the above result only showed the most severe burn rate of submitted samples.
- DNI = Did Not Ignite IBE = Ignited But Extinguished

Total Lead tests

Test Method: CPSC-CH-E1003-09.1/CPSC-CH-E1001-08.3/CPSC-CH-E1002-08.3,
Instrument used for analysis: ICP-OES

Total Lead in paints and surface-coating materials:

Test item(s)	Limit (mg/kg)	MDL (mg/kg)	Test results (mg/kg)			
			1+2+3	4+5+6	7+8	9+10
Total Lead (Pb)	90	10	N.D	N.D	N.D	N.D
Conclusion	-	-	PASS	PASS	PASS	PASS

Total Lead in substrate materials:

Test item(s)	Limit (mg/kg)	MDL (mg/kg)	Test results (mg/kg)			
			11	12+13+14	15	--
Total Lead (Pb)	100	10	N.D	N.D	N.D	--
Conclusion	-	-	PASS	PASS	PASS	--

Note:

- mg/kg = milligram per kilogram = ppm
- MDL = Method Detection Limit
- N.D = Not Detected (less than MDL)
- The limit for composite test should be divided by the mixed number.

Soluble element tests

Test Method: ASTM F963-23 clause 8.3

Instrument used for analysis: ICP-OES

Test item(s)	Limit (mg/kg)	MDL (mg/kg)	Test results (mg/kg)					
			1	2	3	4	5	6
Lead (Pb)	90	5	N.D	N.D	N.D	N.D	N.D	N.D
Cadmium (Cd)	75	5	N.D	N.D	N.D	N.D	N.D	N.D
Mercury (Hg)	60	5	N.D	N.D	N.D	N.D	N.D	N.D
Chromium (Cr)	60	5	N.D	N.D	N.D	N.D	N.D	N.D



Antimony (Sb)	60	5	N.D	N.D	N.D	N.D	N.D	N.D
Arsenic (As)	25	2.5	N.D	N.D	N.D	N.D	N.D	N.D
Barium (Ba)	1000	5	N.D	N.D	N.D	N.D	N.D	N.D
Selenium (Se)	500	5	N.D	N.D	N.D	N.D	N.D	N.D
Conclusion	-	-	PASS	PASS	PASS	PASS	PASS	PASS

Test item(s)	Limit (mg/kg)	MDL (mg/kg)	Test results (mg/kg)					
			7	8	9	10	11	12
Lead (Pb)	90	5	N.D	N.D	N.D	N.D	N.D	N.D
Cadmium (Cd)	75	5	N.D	N.D	N.D	N.D	N.D	N.D
Mercury (Hg)	60	5	N.D	N.D	N.D	N.D	N.D	N.D
Chromium (Cr)	60	5	N.D	N.D	N.D	N.D	N.D	N.D
Antimony (Sb)	60	5	N.D	N.D	N.D	N.D	N.D	N.D
Arsenic (As)	25	2.5	N.D	N.D	N.D	N.D	N.D	N.D
Barium (Ba)	1000	5	N.D	N.D	N.D	N.D	N.D	N.D
Selenium (Se)	500	5	N.D	N.D	N.D	N.D	N.D	N.D
Conclusion	-	-	PASS	PASS	PASS	PASS	PASS	PASS

Test item(s)	Limit (mg/kg)	MDL (mg/kg)	Test results (mg/kg)					
			13	14	15	--	--	--
Lead (Pb)	90	5	N.D	N.D	N.D	--	--	--
Cadmium (Cd)	75	5	N.D	N.D	N.D	--	--	--
Mercury (Hg)	60	5	N.D	N.D	N.D	--	--	--
Chromium (Cr)	60	5	N.D	N.D	N.D	--	--	--
Antimony (Sb)	60	5	N.D	N.D	N.D	--	--	--
Arsenic (As)	25	2.5	N.D	N.D	N.D	--	--	--
Barium (Ba)	1000	5	N.D	N.D	N.D	--	--	--
Selenium (Se)	500	5	N.D	N.D	N.D	--	--	--
Conclusion	-	-	PASS	PASS	PASS	--	--	--

Note:

- 1.mg/kg = milligram per kilogram = ppm
- 2.MDL = Method Detection Limit
- 3.N.D = Not Detected (less than MDL)
4. Test results of soluble heavy elements had been corrected by correction factor.
- 5.Results shown of sample 1~4 and 6~9 were based on resubmitted materials.

**6. Phthalates test**

Test Method: with reference to CPSC-CH-C1001-09.4

Instrument used for analysis: GC-MS.

Test item(s)	Limit (mg/kg)	MDL (mg/kg)	Test results (mg/kg)		
			1+2+3	4+5+6	7+8
Dibutyl phthalate (DBP)	1000	50	N.D	N.D	N.D
Benzyl butyl phthalate (BBP)	1000	50	N.D	N.D	N.D
Bis (2-ethylhexyl) phthalate (DEHP)	1000	50	N.D	N.D	N.D
Diisononyl Phthalate (DINP)	1000	100	N.D	N.D	N.D
Diisobutyl phthalate(DIBP)	1000	50	N.D	N.D	N.D
Di-n-pentyl phthalate (DPENP)	1000	50	N.D	N.D	N.D
Di-n-hexyl Phthalate (DHEXP)	1000	50	N.D	N.D	N.D
Dicyclohexyl phthalate (DCHP)	1000	50	N.D	N.D	N.D
Conclusion	--	--	PASS	PASS	PASS

Test item(s)	Limit (mg/kg)	MDL (mg/kg)	Test results (mg/kg)		
			9+10	11	12+13+14
Dibutyl phthalate (DBP)	1000	50	N.D	N.D	N.D
Benzyl butyl phthalate (BBP)	1000	50	N.D	N.D	N.D
Bis (2-ethylhexyl) phthalate (DEHP)	1000	50	N.D	N.D	N.D
Diisononyl Phthalate (DINP)	1000	100	N.D	N.D	N.D
Diisobutyl phthalate(DIBP)	1000	50	N.D	N.D	N.D
Di-n-pentyl phthalate (DPENP)	1000	50	N.D	N.D	N.D
Di-n-hexyl Phthalate (DHEXP)	1000	50	N.D	N.D	N.D
Dicyclohexyl phthalate (DCHP)	1000	50	N.D	N.D	N.D
Conclusion	--	--	PASS	PASS	PASS

Test item(s)	Limit (mg/kg)	MDL (mg/kg)	Test results (mg/kg)		
			15	--	--
Dibutyl phthalate (DBP)	1000	50	N.D	--	--
Benzyl butyl phthalate (BBP)	1000	50	N.D	--	--
Bis (2-ethylhexyl) phthalate (DEHP)	1000	50	N.D	--	--
Diisononyl Phthalate (DINP)	1000	100	N.D	--	--
Diisobutyl phthalate(DIBP)	1000	50	N.D	--	--



Di-n-pentyl phthalate (DPENP)	1000	50	N.D	--	--
Di-n-hexyl Phthalate (DHEXP)	1000	50	N.D	--	--
Dicyclohexyl phthalate (DCHP)	1000	50	N.D	--	--
Conclusion	--	--	PASS	--	--

Note:-

1. mg/kg = milligram per kilogram = ppm
2. MDL = Method Detection Limit
3. N.D = Not detected (less than MDL)
4. The limit for composite test should be divided by the mixed number.

16 CFR 1500&1501 Mechanical and Physical Tests

Section	Description	Result
16 CFR 1500.48	Technical requirements for determining a sharp point in toys and other articles intended for use by children under 8 years of age	Pass
16 CFR 1500.49	Technical requirements for determining a sharp metal or glass edge in toys and other articles intended for use by children under 8 years of age	Pass
16 CFR 1500.50	Use and abuse testing (see table 1)	Pass
16 CFR 1501	Method for identifying toys and other articles intended for use by children under 3 years of age which present choking, aspiration, or ingestion hazards because of small parts	N/A

Table 1 :Use and abuse testing

Applicable section	Description	Test Condition
16 CFR 1500.50	Normal use testing	---
16 CFR 1500.53	Drop test	4 drops at 3ft.
16 CFR 1500.53	Torque test	4 in-lbs or 180°
16 CFR 1500.53	Tension test	15lbs

Note: N/A = Not Application

16 CFR 1500.44 Flammability Tests

Test Method:FHSA 16 CFR 1500.44:Method for determining extremely flammable and flammable solids.

Sample	Burn rate (in/sec.)	Results
A1	DNI	Pass

Note:

1. In accordance with the FHSA 16 CFR 1500.3(c)(6)(vi), the burning rate should not be greater than 0.1 inch per second.
2. All styles of submitted samples were tested, the above result only showed the most severe burn rate of submitted samples.

DNI=Did Not Ignite IBE=Ignited But Extinguished

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**US 16 CFR 1303 Lead content - Lead-containing paint**

Test Method: CPSC-CH-E1003-09.1

Instrument used for analysis: ICP-OES

Test item(s)	Limit (mg/kg)	MDL (mg/kg)	Test results (mg/kg)				
			1+2+3	4+5+6	7+8	9+10	--
Total Lead (Pb)	90	10	N.D	N.D	N.D	N.D	--
Conclusion	--	--	PASS	PASS	PASS	PASS	--

Note:

1. mg/kg = milligram per kilogram = ppm
2. MDL = Method Detection Limit
3. N.D = Not Detected (less than MDL)
4. The limit for composite test should be divided by the mixed number.

US 15 U.S.C. 1278a - Lead content (CPSIA)

Test Method: CPSC-CH-E1003-09.1 and / or CPSC-CH-E1001-08.3 and / or CPSC-CH-E1002-08.3

Instrument used for analysis: ICP-OES

For coating or paint:

Test item(s)	Limit (mg/kg)	MDL (mg/kg)	Test results (mg/kg)				
			1+2+3	4+5+6	7+8	9+10	--
Total Lead (Pb)	90	10	N.D	N.D	N.D	N.D	--
Conclusion	--	--	PASS	PASS	PASS	PASS	--

For others :

Test item(s)	Limit (mg/kg)	MDL (mg/kg)	Test results (mg/kg)				
			11	12+13+14	15	--	--
Total Lead (Pb)	100	10	N.D	N.D	N.D	--	--
Conclusion	--	--	PASS	PASS	PASS	--	--

Note:

1. mg/kg = milligram per kilogram = ppm
2. MDL = Method Detection Limit
3. N.D = Not Detected (less than MDL)
4. The limit for composite test should be divided by the mixed number.

US 16 CFR 1307 - Phthalates test (CPSIA)

Test Method: with reference to CPSC-CH-C1001-09.4

Instrument used for analysis: GC-MS.

Test item(s)	Limit (mg/kg)	MDL (mg/kg)	Test results (mg/kg)			
			1+2+3	4+5+6	7+8	9+10
Dibutyl phthalate (DBP)	1000	50	N.D	N.D	N.D	N.D
Benzyl butyl phthalate (BBP)	1000	50	N.D	N.D	N.D	N.D

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Bis (2-ethylhexyl) phthalate (DEHP)	1000	50	N.D	N.D	N.D	N.D
Diisononyl Phthalate (DINP)	1000	100	N.D	N.D	N.D	N.D
Diisobutyl phthalate(DIBP)	1000	50	N.D	N.D	N.D	N.D
Di-n-pentyl phthalate (DPENP)	1000	50	N.D	N.D	N.D	N.D
Di-n-hexyl Phthalate (DHEXP)	1000	50	N.D	N.D	N.D	N.D
Dicyclohexyl phthalate (DCHP)	1000	50	N.D	N.D	N.D	N.D
Conclusion	--	--	PASS	PASS	PASS	PASS

Test item(s)	Limit (mg/kg)	MDL (mg/kg)	Test results (mg/kg)			
			11	12+13+14	15	--
Dibutyl phthalate (DBP)	1000	50	N.D	N.D	N.D	--
Benzyl butyl phthalate (BBP)	1000	50	N.D	N.D	N.D	--
Bis (2-ethylhexyl) phthalate (DEHP)	1000	50	N.D	N.D	N.D	--
Diisononyl Phthalate (DINP)	1000	100	N.D	N.D	N.D	--
Diisobutyl phthalate(DIBP)	1000	50	N.D	N.D	N.D	--
Di-n-pentyl phthalate (DPENP)	1000	50	N.D	N.D	N.D	--
Di-n-hexyl Phthalate (DHEXP)	1000	50	N.D	N.D	N.D	--
Dicyclohexyl phthalate (DCHP)	1000	50	N.D	N.D	N.D	--
Conclusion	--	--	PASS	PASS	PASS	--

Note:

- 1.mg/kg = milligram per kilogram = ppm
- 2.MDL = Method Detection Limit
- 3.N.D = Not detected (less than MDL)
4. The limit for composite test should be divided by the mixed number.

Total Lead – California Proposition 65

Test Method : With reference to CPSC-CH-E1003-09.1 and / or CPSC-CH-E1001-08.3 and / or CPSC-CH-E1002-08.3, the analysis was performed by ICP-OES.

For coating or paint

Tested Item(s)	Limit (mg/kg)	MDL (mg/kg)	Result (mg/kg)					
			1+2+3	4+5+6	7+8	9+10	--	--
Total Lead	90	10	N.D	N.D	N.D	N.D	--	--
Conclusion	-	-	PASS	PASS	PASS	PASS	--	--

For others

Tested Item(s)	Limit	MDL	Result (mg/kg)
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	(mg/kg)	(mg/kg)	11	12+13+1 4	15	--	--	--
Total Lead	100	10	N.D	N.D	N.D	--	--	--
Conclusion	-	-	PASS	PASS	PASS	--	--	--

Note:

1. mg/kg = milligram per kilogram = ppm
2. MDL = Method Detection Limit
3. N.D = Not Detected (less than MDL)
4. The limit for composite test should be divided by the mixed number.

Phthalates Content – California Proposition 65

Test method : With reference to CPSC-CH-C1001-09.4, the analysis was performed by GC-MS.

Tested Item(s)	CAS No.	Limit (mg/kg)	MDL (mg/kg)	Result (mg/kg)		
				1+2+3	4+5+6	7+8
Dibutylphthalate (DBP)	84-74-2	1000	30	N.D	N.D	N.D
Benzylbutylphthalate (BBP)	85-68-7	1000	30	N.D	N.D	N.D
Diethylhexylphthalate (DEHP)	117-81-7	1000	30	N.D	N.D	N.D
Diisononylphthalate (DINP)*	28553-12-0	1000	50	N.D	N.D	N.D
Di-n-octyl Phthalate (DNOP)*	117-84-0	1000	30	N.D	N.D	N.D
Di-iso-decyl phthalate (DIDP)*	26761-40-0	1000	50	N.D	N.D	N.D
Di-iso-butylorthophthalate (DIBP)	84-69-5	1000	30	N.D	N.D	N.D
Dihexylphthalate (DnHP)	84-75-3	1000	30	N.D	N.D	N.D
Conclusion	-	-	-	PASS	PASS	PASS

Tested Item(s)	CAS No.	Limit (mg/kg)	MDL (mg/kg)	Result (mg/kg)		
				9+10	11	12+13+14
Dibutylphthalate (DBP)	84-74-2	1000	30	N.D	N.D	N.D
Benzylbutylphthalate (BBP)	85-68-7	1000	30	N.D	N.D	N.D
Diethylhexylphthalate (DEHP)	117-81-7	1000	30	N.D	N.D	N.D
Diisononylphthalate (DINP)*	28553-12-0	1000	50	N.D	N.D	N.D
Di-n-octyl Phthalate (DNOP)*	117-84-0	1000	30	N.D	N.D	N.D
Di-iso-decyl phthalate (DIDP)*	26761-40-0	1000	50	N.D	N.D	N.D
Di-iso-butylorthophthalate (DIBP)	84-69-5	1000	30	N.D	N.D	N.D
Dihexylphthalate (DnHP)	84-75-3	1000	30	N.D	N.D	N.D
Conclusion	-	-	-	PASS	PASS	PASS



Tested Item(s)	CAS No.	Limit (mg/kg)	MDL (mg/kg)	Result (mg/kg)		
				15	--	--
Dibutylphthalate (DBP)	84-74-2	1000	30	N.D	--	--
Benzylbutylphthalate (BBP)	85-68-7	1000	30	N.D	--	--
Diethylhexylphthalate (DEHP)	117-81-7	1000	30	N.D	--	--
Diisononylphthalate (DINP)*	28553-12-0	1000	50	N.D	--	--
Di-n-octyl Phthalate (DNOP)*	117-84-0	1000	30	N.D	--	--
Di-iso-decyl phthalate (DIDP)*	26761-40-0	1000	50	N.D	--	--
Di-iso-butylorthophthalate (DIBP)	84-69-5	1000	30	N.D	--	--
Dihexylphthalate (DnHP)	84-75-3	1000	30	N.D	--	--
Conclusion	-	-	-	PASS	--	--

Note:

1. mg/kg = milligram per kilogram = ppm
2. MDL = Method Detection Limit
3. N.D = Not Detected (less than MDL)
4. The limit for composite test should be divided by the mixed number.

US 15 U.S.C 2063a - Tracking labels for children's products*

Requirement	Result
The manufacturer of a children's product shall place permanent, distinguishing marks on the product and its packaging include:	Pass
- the manufacturer or private labeler, location and date of production of the product, cohort information (including the batch, run number, or other identifying characteristic), and any other information determined by the manufacturer to facilitate ascertaining the specific source of the product by reference to those marks.	Pass

Lead (Pb) content test - LPPA

Test Method: CPSC-CH-E1003-09.1 and / or CPSC-CH-E1001-08.3 and / or CPSC- CH-E1002-08.3

Instrument used for analysis: ICP-OES

Tested Item(s)	Limit (mg/kg)	MDL (mg/kg)	Result (mg/kg)					
			1+2+3	4+5+6	7+8	9+10	11	12+13+14
Total Lead	40	10	N.D	N.D	N.D	N.D	N.D	N.D
Conclusion	-	-	PASS	PASS	PASS	PASS	PASS	PASS

Tested Item(s)	Limit (mg/kg)	MDL (mg/kg)	Result (mg/kg)					
			15	--	--	--	--	--
Total Lead	40	10	N.D	--	--	--	--	--
Conclusion	-	-	PASS	--	--	--	--	--



Note:

1. mg/kg = milligram per kilogram = ppm
2. MDL = Method Detection Limit
3. N.D = Not Detected (less than MDL)
4. The limit for composite test should be divided by the mixed number.

Mechanical and physical properties

As specified in European Standard on Safety of Toys EN / BS EN 71 part 1:2014+A1:2018.

Clause	Description	Result
		A1
4	General requirements	
4.1	Material cleanliness	Pass
4.2	Assembly	N/A
4.3	Flexible plastics sheeting	N/A
4.4	Toy bags	N/A
4.5	Glass	N/A
4.6	Expanding materials	N/A
4.7	Edges	Pass
4.8	Points and metallic wires	Pass
4.9	Protruding parts	Pass
4.10	Parts moving against each other	
4.10.1	Folding and sliding mechanisms	N/A
4.10.2	Driving mechanisms	N/A
4.10.3	Hinges (Not applicable to products with a hinged part that has a mass less than 250g.)	N/A
4.10.4	Springs	N/A
4.11	Mouth-actuated toys and other toys intended to be put in the mouth	N/A
4.12	Balloons	N/A
4.13	Cords of toy kites and other flying toys	N/A
4.14	Enclosures	
4.14.1	Toys which a child can enter	N/A
4.14.2	Masks and helmets	N/A
4.15	Toys intended to bear the mass of a child	
4.15.1	Toys propelled by the child or by other means	N/A
4.15.1.1	General	N/A
4.15.1.2	Warnings and instructions for use	N/A



Clause	Description	Result
		A1
4.15.1.3	Strength	N/A
4.15.1.4	Stability	N/A
4.15.1.5	Braking	N/A
4.15.1.6	Transmission and wheel arrangement	N/A
4.15.1.7	Adjustable seat pillar and handlebar stem minimum insertion marks	N/A
4.15.1.8	Electrically-driven ride-on toys	N/A
4.15.2	Toy bicycles	N/A
4.15.2.1	General	N/A
4.15.2.2	Warning and instructions for use	N/A
4.15.2.3	Braking requirements	N/A
4.15.3	Rocking horses and similar toys	N/A
4.15.4	Toys not propelled by a child	N/A
4.15.5	Toys scooters	N/A
4.15.5.1	General	N/A
4.15.5.2	Warnings and instructions for use	N/A
4.15.5.3	Strength	N/A
4.15.5.4	Adjustable and folding steering tubes	N/A
4.15.5.5	Braking	N/A
4.15.5.6	Wheel size	N/A
4.15.5.7	Protruding parts	N/A
4.16	Heavy immobile toys	N/A
4.17	Projectile toys	N/A
4.17.1	General	N/A
4.17.2	All projectiles	N/A
4.17.3	Projectile toys with stored energy	N/A
4.17.4	Certain projectile toys without stored energy	N/A
4.18	Aquatic toys and inflatable toys	N/A
4.19	Percussion caps specifically designed for use in toys and toys using percussion caps	N/A
4.20	Acoustics	N/A
4.20.1	Exposure categories for time-averaged sound pressure levels	N/A
4.20.2	Emission sound pressure level limits	N/A



Clause	Description	Result
		A1
4.21	Toys containing a non-electrical heat source	Pass
4.22	Small balls	N/A
4.23	Magnets	N/A
4.23.1	General	N/A
4.23.2	Toys other than magnetic/electrical experimental sets intended for children over 8 years	N/A
4.23.3	Magnetic/electrical experimental sets intended for children over 8 years	N/A
4.24	Yo-yo balls	N/A
4.25	Toys attached to food	N/A
4.26*	Toy Disguise Costumes	N/A
4.27	Flying toys	N/A
4.27.1	General	N/A
4.27.2	Rotors and propellers on flying toys	N/A
4.27.3	Rotors and propellers on remote controlled flying toys	N/A
5	Toys intended for children under 36 months Remark: According to Directive 2009/48/EC, a toy intended for use by children under 36 months must be designed and manufactured in such a way that it can be cleaned, except if it contains a mechanism that may be damaged if soaked washed. The toy shall fulfill the safety requirements also after having been cleaned. The manufacturer should provide instructions on how the toy has to be cleaned.	N/A
5.1	General requirements	
5.1a	Small part requirement on toys & removable Components (Test method 8.2)	N/A
5.1b	Torque test (Test method 8.3)	N/A
	Tension test (Test method 8.4)	N/A
	Drop test (Test method 8.5)	N/A
	Impact test (Test method 8.7)	N/A
	Compression test (Test method 8.8)	N/A
	Sharp edge (Test method 8.11)	Pass
	Sharp point (Test method 8.12)	Pass
5.1c	Metal points and wires with a cross section of 2 mm or less	N/A
5.1d	Tip over test for Large and bulky toys (Test method 8.6)	N/A
5.1e	Glued wooden toys and toys with glued on plastic decals	N/A
5.1f	The casing of toys intended for children too young to sit up unaided	N/A



Clause	Description	Result
		A1
5.1g	Foam toys and toys containing accessible foam components	N/A
5.2	Soft-filled toys and soft-filled parts of a toy	N/A
5.3	Plastic sheeting	N/A
5.4	Cords, chains and electrical cables in toys	N/A
5.4.1	General	N/A
5.4.2	Cords and chains in toys intended for children under 18 months	N/A
5.4.3	Cords and chains in toys intended for children of 18 months or over but under 36 months	N/A
5.4.4	Fixed loops, tangled loops and nooses	N/A
5.4.5	Cords and chains on pull along toys	N/A
5.4.6	Electrical cables	N/A
5.4.7	Cross-sectional dimension of certain cords	N/A
5.4.8	Self-retracting cords	N/A
5.4.9	Toys attached to or intended to be strung across a cradle, cot or perambulator	N/A
5.5	Liquid-filled toys	N/A
5.6	Speed limitation of electrically-driven ride-on toys	N/A
5.7	Glass and porcelain	N/A
5.8	Shape and size of certain toys	N/A
5.9	Toys comprising monofilament fibres	N/A
5.10	Small balls	N/A
5.11	Play figures	N/A
5.12	Hemispheric-shaped toys	N/A
5.13	Suction cups	N/A
5.14	Straps intended to be worn fully or partially around the neck	N/A
5.15	Sledges with cords for pulling	N/A



Clause	Description	Result
		A1
6	<p>Packaging</p> <p>Remark: The packaging of toys shall conform to the following requirements:</p> <p>a) Bags made of flexible plastics with an opening perimeter greater than 380 mm used for external or internal packaging, shall have an average sheet thickness of 0,038 mm or more when tested according to 8.25.1 (plastic sheeting, thickness).</p> <p>b) Bags made of flexible plastics with an opening perimeter greater than 380 mm shall not have a drawstring or cord as a means of closing.</p> <p>c) The requirements in 5.10 (small balls) apply to packaging and packaging components that are small balls regardless of the intended age group of the toy.</p> <p>d) Regardless of the intended age group of the toy, any separable part of its packaging, which is a small ball or that has a cylindrical shape with a rounded end shall not pass entirely through template E when tested according to 8.32.1 (small balls and suction cups). This requirement does not apply to parts with a major dimension of 64 mm or more, or parts that are attached to another part of the packaging with an attachment that does not break when tested according to 8.3 (torque test) and 8.4.2.1 (tension test, general).</p> <p>e) The requirements in 5.12 (hemispheric shaped toys) apply to hemispheric-shaped containers that are part of the packaging for toys intended for children under three.</p>	N/A
7	<p>Warnings and instructions for use</p> <p>Remark:</p> <ul style="list-style-type: none"> - Toys made available on the market shall bear the CE marking. The CE marking shall be affixed visibly, legibly and indelibly to the toy, to an affixed label or to the packaging. In the case of small toys and toys consisting of small parts, the CE marking may alternatively be affixed to a label or an accompanying leaflet. Where specific legislation does not impose specific dimensions, the CE marking shall be at least 5 mm high. - The manufacturer's name, registered trade name or registered trade mark and the address at which the manufacturer can be contacted shall be indicated on the toy or, where that is not possible, on its packaging or in a document accompanying the toy. This requirement applies also to the name and address etc. of any importer. - 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. - Manufacturers and importers shall ensure that the toy is accompanied by instructions and safety information in a language or languages easily understood by consumers, as determined by the Member State concerned. - A Member State may, within its territory, stipulate that warnings and safety instructions shall be written in a language or languages easily understood by consumers, as determined by that Member State. 	Pass



Clause	Description	Result
		A1
7.1	<p>General</p> <p>Remark: Warnings on toys shall not be misleading or incorrect. Toys intended for children under 36 months shall comply with the requirements in Clause 5 of this standard. A warning on a toy or its packaging does not release the manufacturer or his authorized representative from the obligation to meet these requirements. The warnings shall be preceded by the words 'Warning' or 'Warnings', as appropriate.</p>	N/A
7.2	<p>Toys not intended for children under 36 months</p> <p>Remark: Toys which are not intended for, but might be dangerous for children under 36 months shall bear a warning, for example: "Not suitable for children under 36 months" or "Not suitable for children under three years" together with a brief indication of the specific hazard calling for this restriction. The age warning shall be clearly legible at the point of sale of the product and appear either on the toy itself or on its retail packaging. The indication of the specific hazard may appear on a leaflet or in the instructions for use.</p>	Pass
7.3	<p>Latex balloon</p> <p>Remark: The packaging of latex balloons shall bear the following warning: "Warning! Children under eight years can choke or suffocate on uninflated or broken balloons. Adult supervision required. Keep uninflated balloons from children. Discard broken balloons at once." The packaging of natural latex balloons shall indicate "Made of natural rubber latex".</p>	N/A
7.4	<p>Aquatic toys</p> <p>Remark: Aquatic toys and their packaging shall bear the following warning: "Warning! Only to be used in water in which the child is within its depth and under supervision." The warning on the toy shall be indelible and in a colour which contrasts with the body of the toy. The minimum height of letters shall be 3 mm and the marking on inflatable toys shall be no more than 100 mm from one of the air inflation inlets.</p> <p>No advertising copy or graphics shall or imply that the child will be safe with such a toy if left unsupervised.</p>	N/A
7.5	<p>Functional toys</p> <p>Remark: Functional toys or their packaging shall bear the warning: "Warning! To be used under the direct supervision of an adult." In addition, these toys shall be accompanied by directions giving working instructions as well as the precautions to be taken by the user, with the warning that failure to take these precautions would expose the user to the hazards — to be specified — normally associated with the appliance or product of which the toy is a scale model or an imitation. It shall also be indicated that the toy is to be kept out of the reach of very young children.</p>	N/A
7.6	<p>Hazardous sharp functional edges and points</p> <p>Remark: For toys that incorporate hazardous sharp functional edges (see 8.11, sharpness of edges) or hazardous sharp functional points (see 8.12, sharpness of points), attention shall be drawn to the potential hazards of such points and edges on the packaging and in the instructions for use accompanying the toy, if appropriate.</p>	N/A



Clause	Description	Result
		A1
7.7	Projectiles Remark: Toys with projectiles shall be accompanied by instructions for use, which draw attention to the hazards of using missiles other than those supplied or recommended by the manufacturer. Toys capable of discharging a projectile with a kinetic energy greater than 0.08 J shall be accompanied by the following warning: "Warning! Do not aim at eyes or face."	N/A
7.8	Imitation protective masks and helmets Remark: Toys that are imitations of protective masks and helmets and their packaging, if any, shall bear the following warning: "Warning! This is a toy. Does not provide protection."	N/A
7.9	Toy kites Remark: Toy kites and other flying toys with cords exceeding 2 m materially linking the toy to the child shall bear the following warning: "Warning! Do not use near overhead power lines or during thunderstorms."	N/A
7.10	Roller skates, inline skates, skateboards and certain other ride-on toys Remark: Roller skates, inline skates and skateboards for children offered for sale as toys shall bear the warning: "Warning! Protective equipment should be worn. Not for children with a body weight of more than 20 kg." ride-on toys without a braking device shall carry the following warning: "Warning. This toy has no brake."	N/A
7.11	Toys intended to be attached to or strung across a cradle, cot, or perambulator Remark: Toys intended to be strung across a cradle, cot, or perambulator by means of strings, cords, elastics or straps shall bear the following warning: "Warning! To prevent possible injury by entanglement, remove this toy when the child begins to push up on hands and knees."	N/A
7.12	Liquid-filled teethingers Remark: Liquid filled teethingers shall be accompanied by the following instruction: "Cool only in a domestic refrigerator, do not place in the freezer compartment."	N/A
7.13	Percussion caps specifically designed for use in toys Remark: Toys which produce high impulse sound levels or their packaging shall bear the following warning: "Warning! Do not uses close to the ear! Misuse may cause damage to hearing." For toys using percussion caps add: "Do not fire indoors!"	N/A
7.14	Acoustics Remark: The packaging of percussion caps shall carry the following warning: "Warning! Do not fire indoors or near eyes and ears. Do not carry caps loose in a pocket."	N/A
7.15	Toys bicycle Remark: Toy bicycles shall carry a warning: "Warning. Protective equipment should be worn. Not to be used in traffic.". Moreover, parents or carers should ensure that children are properly instructed in the use of toy bicycles, particularly in the safe use of the braking systems.	N/A



Clause	Description	Result
		A1
7.16	<p>Toys intended to bear the mass of a child</p> <p>Remark: Toys those due to their construction, strength, design or other factors are not suitable for children over 36 months shall carry a warning, for example: "Warning! Not to be used by children over 36 months" together with a brief indication of the specific reason calling for this restriction (e.g. insufficient strength). The age warning shall be clearly legible at the point of sale of the product.</p>	N/A
7.17	<p>Toys comprising monofilament fibres</p> <p>Remark: Toys comprising monofilament fibres of straightened length greater than 50 mm and attached to a fabric base or their <i>packaging</i> shall be labelled as follows: "Warning! Not suitable for children under 10 months due to long hair".</p>	N/A
7.18	<p>Toy scooters</p> <p>Remark: Toy scooters intended for children with a body mass of 20 kg or and their packaging shall carry the following warning: "Warning. Protective equipment should be worn. Not to be used in traffic. 20 kg max."</p> <p>Toy scooters intended for children with a body mass of 50 kg or less and their packaging shall carry the following warning: "Warning. Protective equipment should be worn. Not to be used in traffic. 50 kg max."</p> <p>The instructions for use shall contain a reminder that the toy shall be used with caution, since it requires great skill, so as to avoid falls or collisions causing injury to the user and third parties. They shall also, as appropriate, include information such as:</p> <ul style="list-style-type: none"> - the warning indicated above; - how to safely fold or unfold foldable scooters; - the necessity to ensure that all locking devices are engaged; - the dangers of using toy scooters on public highways; - a recommendation to use protective equipment such as a helmet, gloves, knee-pads and elbow-pads. 	N/A
7.19	<p>Rocking horses and similar toys</p> <p>Remark: Rocking horses and similar toys, where the intended sitting surface is 600 mm or more above the ground, shall carry the following warning: "Warning! Risk of falling. Do not leave children under 36 months sitting or playing unattended." The warning shall be clearly legible at the point of sale of the product.</p>	N/A
7.20	<p>Magnetic/electrical experimental sets</p> <p>Remark: The packaging and the instructions for use of magnetic/electrical experimental sets shall carry the following warning:</p> <p>"WARNING! Not suitable for children under 8 years. This product Contains (a) small magnets(s). Swallowed magnets can stick together across intestines causing serious injuries. Seek immediate medical attention if magnet(s) are swallowed".</p> <p>This warning is not required for magnetic/electrical experimental sets in which all magnets have a magnetic flux index less than 50 kG2mm2 (0,5 T2mm2) when tested according to 8.35 (magnetic flux index), or do not fit entirely in the cylinder when tested according to 8.2 (small parts cylinder).</p>	N/A



Clause	Description	Result
		A1
7.21	Toys with electrical cables exceeding 300 mm in length Remark: Toys intended for children under 36 months, with electrical cables longer than 300 mm and their packaging shall carry the following warning: "Warning. Long cable. Strangulation hazard."	N/A
7.22	Toys with cords or chains intended for children of 18 months and over but under 36 months Remark: Toys intended for children of 18 months or over but under than 36 months excluding pull-along toys" shall, when required by 5.4 carry the following warning on the toy or its packaging: "Warning. Not suitable for children under 18 months. Long cord/Long chain. Strangulation hazard." The age warning shall be clearly legible at the point of sale of the product.	N/A
7.23	Toys intended to be attached to a cradle, cot or perambulator Remark: Toys intended to be attached to a cradle, cot or perambulator, and their packaging, where any attached cords or chains do not comply with the requirements of 5.4.2 to 5.4.8, shall bear the following warning: "Warning. Attach this toy out of the reach of the child. To prevent possible injury by entanglement, remove this toy when the child starts trying to get up on its hands and knees in a crawling position." The toy shall be accompanied by instructions which indicate how the toy is to be affixed out of reach of children.	N/A
7.24	Sledges with cords for pulling Remark: Sledges intended for outdoor use on snow under adult supervision, that are equipped with a cord for pulling should carry the following warning on the toy or on its packaging: "Warning. Strangulation hazard. Long cord. Adult supervision required."	N/A
7.25	Flying toys	N/A
7.25.1	Flying toys Remark: Flying toys with rotors or propellers that might reasonably be able to be aimed at the face, or their packaging, shall carry the following warning: "Warning. Always operate the toy away from eyes or face."	N/A
7.25.2	Remote controlled flying toys Remark: The instructions for use for remote control flying toys shall carry the following information: — a reminder that the toy shall be used with caution since skill is required in order to control the flight and avoid collisions with the user, objects or third parties; — precautions to be observed such as "Do not touch the rotating rotor, avoid loose clothing or hair that could be caught in the rotor, do not fly near the face"; — advice to adult supervisors to teach children how to safely fly and control the toy; — conditions to be observed when using the toy (e.g. flying room/area needed, indoors or outdoors, no obstacles and persons within flying range to keep the toy in line of sight, maximum operating distance); — advice to keep the instructions for use.	N/A



Clause	Description	Result
		A1
7.26	Improvised projectiles Remark: The potential dangers of using projectiles other than those supplied or recommended by the manufacturer shall be drawn to the attention of the user. The following warning shall be on the toy or its packaging: "Warning. Do not discharge an object other than the projectile provided with this toy."	N/A

Remark:

1. N/A = Not applicable, N/R = Not request

Note: Only applicable clause(s) was/ were shown.

Flammability of toys

As specified in European Standard on Safety of Toys EN / BS EN 71 part 2:2020.

Clause	Description	Result
		A1
4.1	General requirements	Pass
4.2	Toys to be worn on the head	
4.2.1	General	N/A
4.2.2	Beards, moustaches, wigs, etc., made from pile or flowing elements which protrude 50 mm or more from the surface of the toy.	N/A
4.2.3	Beards, moustaches, wigs, etc., made from pile or flowing elements which protrude less than 50 mm from the surface of the toy.	N/A
4.2.4	Full or partial moulded head masks	N/A
4.2.5	Toys to be worn on the head (except those covered by 4.2.2 and 4.2.3), hoods, headdresses including upward protruding items and masks not covered by 4.2.4 which partially or fully cover the head (e.g. fabric and paperboard masks, eye masks, face masks), but excluding those items covered by 4.3.	N/A
4.3	Toy disguise costumes and toys intended to be worn by a child in play	N/A
4.4	Toys intended to be entered by a child	N/A
4.5	Soft-filled toys	N/A
	A: Soft stuffed toys with a maximum size of less than 520mm	N/A
	B: Soft stuffed toys with a maximum size greater than or equal to 520mm	N/A

Note:

4.1 The following materials shall not be present in toys:

- Celluloid (cellulose nitrate), except when used in varnish, paint or glue, or in balls of the type used for table tennis or similar games;
- Highly flammable solids;
- Materials with a piled surface which produce surface flash when a flame is applied to the tested material under the conditions described in 5.5. Piled surfaces showing no momentary area of flame over the area of the piled surface remote from the test flame are considered to meet this requirement. Specific materials to which the test flame is applied in order to check compliance of the toy with requirements in 4.2 to 4.5 are considered to comply with the above requirements if the toy meets its appropriate requirements in 4.2 to 4.5.



In addition, toys shall not contain flammable gases, extremely flammable liquids, highly flammable liquids, flammable liquids and flammable gels except as provided for below:

- Flammable liquids and flammable gels supplied in sealed containers having a maximum volume of 15 ml per container;

- Highly flammable liquids and flammable liquids being entirely retained within a porous material in capillary channels of writing instruments;

- Flammable liquids with a viscosity greater than $260 \times 10^{-6} \text{ m}^2/\text{s}$ corresponding to a flow time of more than 38 s when determined in accordance with EN ISO 2431:2019 using cup No. 6;

- Highly flammable liquids contained in chemical toys, and in olfactory board games, cosmetic kits and gustative games, as defined in 2009/48/EC.

4.2.1 The requirements of 4.2 apply to:

- Beards, moustaches, wigs, made from pile or flowing elements,
- Masks,
- Hats Hoods, headdresses etc.,

but not to paper or paperboard hats unless they have embellishments or attachments that form flowing elements.

When a product incorporates several features, for example a hat with an attached mask and hair, each part shall be tested separately to the applicable clause relevant to that particular part of the toy.

Attachments which are used for the purpose of securing a mask, hat etc., on the head (e.g. strings, elastic, plastic strap) shall not be tested.

4.2.2 When tested according to 5.2, the duration of flaming shall not be more than 2 s after the removal of the test flame. In addition, if ignition occurs, the maximum burnt length of pile, or flowing elements shall not be:

- a) more than 50 % of the greatest initial length, when the initial length was 150 mm or more;
- b) more than 75 % of the greatest initial length, when the initial length was less than 150 mm.

When determining whether materials are required to be tested under 4.2.2, the distance by which the material protrudes shall be measured without applying tension to the protruding part, e.g. curly hair is not straightened. Plaits or braided hair shall be fully released and combed, where possible, before testing.

4.2.3 Beards, moustaches, wigs, etc., made from pile or flowing elements which protrude 5 mm or less from the surface of the toy are regarded as headdresses and are covered by 4.2.5.

When tested in accordance with 5.3, the duration of flaming shall not be more than 2 s after the removal of the test flame, and the maximum distance between the upper edge of the burnt area and the point of application of the test flame shall not be more than 70 mm.

4.2.4 When tested in accordance with 5.3, the duration of flaming shall not be more than 2 s after the removal of the test flame. The maximum distance between the upper edge of the burnt area and the point of application of the test flame shall not be more than 70 mm.

This requirement does not apply to moulded eye masks that neither cover the chin nor a cheek as they are covered by 4.2.5.

4.2.5 When tested in accordance with 5.4, the rate of spread of flame of the test specimen shall not exceed 10 mm/s or the test specimen shall self-extinguish.

4.3 This requirement does not apply to separate toys to be worn on the head, which are supplied with a toy disguise costume.

When tested in accordance with 5.5 parts of toy disguise costume and toys intended to be worn by children in play which contain loose stuffing which would fall out if tested in accordance with 5.4.1.2 shall not exceed 30 mm/s rate of spread of flame or the test specimen shall self-extinguish.

This requirement does not apply to soft-filled parts which, when positioned in accordance with 5.5.3, present a maximum unhindered vertical soft-filled height of 150 mm or less.

When tested in accordance with 5.4, all other toy disguise costumes and toys intended to be worn by a child in play (and parts thereof), shall not exceed 30 mm/s rate of spread of flame or the test specimen shall self-extinguish.



In all cases if the rate of spread of flame is between 10 mm/s and 30 mm/s, the appropriate component(s) of the toy and the packaging shall be permanently marked with the following warning: "Warning! Keep away from fire".

4.4 These include for example toy tents, puppet theatres, wigwams, tepees and play tunnels.

When tested in accordance with 5.4, the rate of spread of flame of the test specimen shall not exceed 30 mm/s or the test specimen shall self-extinguish.

If the test specimen has a rate of spread of flame greater than 20 mm/s when tested in accordance with 5.4, there shall be no flaming debris or molten drips.

If the material has non-identical surfaces, both sides shall be tested.

If the rate of spread of flame is between 10 mm/s and 30 mm/s, the appropriate component(s) of the toy and the packaging shall be permanently marked with the following warning: "Warning! Keep away from fire".

4.5 These requirements do not apply to:

- soft-filled toys or soft-filled parts of a toy that cannot be cuddled or hugged by child during play;
- toys which, when positioned in accordance with 5.5.3, present a maximum unhindered vertical soft-filled height of 150 mm or less.

When tested in accordance with 5.5, the rate of spread of flame on the surface shall not be more than 30 mm/s or the toy shall self-extinguishing.

Migration of certain elements

Test method: EN / BS EN 71-3:2019+A1:2021, acid extraction method

Instrument for analysis: ICP-OES / ICP-MS for elements, GC-MS for organic tin, IC-ICP-MS for Cr³⁺ and Cr⁶⁺

Category III materials:

Tested item	Limit (mg/kg)	MDL (mg/kg)	Results (mg/kg)				
			1	2	3	4	5
Aluminium (Al)	28130	20	N.D	N.D	N.D	N.D	N.D
Antimony (Sb)	560	5	N.D	N.D	N.D	N.D	N.D
Arsenic (As)	47	2	N.D	N.D	N.D	N.D	N.D
Barium (Ba)	18750	20	N.D	N.D	N.D	N.D	N.D
Boron (B)	15000	20	N.D	N.D	N.D	N.D	N.D
Cadmium (Cd)	17	0.5	N.D	N.D	N.D	N.D	N.D
Chromium (III) (Cr ³⁺)*	460	2	N.D	N.D	N.D	N.D	N.D
Chromium (VI) (Cr ⁶⁺)*	0.053	0.01	N.D	N.D	N.D	N.D	N.D
Cobalt (Co)	130	2	N.D	N.D	N.D	N.D	N.D
Copper (Cu)	7700	20	N.D	N.D	N.D	N.D	N.D
Lead (Pb)	23	1	N.D	N.D	N.D	N.D	N.D
Manganese (Mn)	15000	20	N.D	N.D	N.D	N.D	N.D
Mercury (Hg)	94	2	N.D	N.D	N.D	N.D	N.D
Nickel (Ni)	930	5	N.D	N.D	N.D	N.D	N.D
Selenium (Se)	460	5	N.D	N.D	N.D	N.D	N.D
Strontium (Sr)	56000	20	N.D	N.D	N.D	N.D	N.D



Tin (Sn)	180000	4	N.D	N.D	N.D	N.D	N.D
Organic tin #	12	10	N.D	N.D	N.D	N.D	N.D
Zinc (Zn)	46000	20	N.D	N.D	N.D	N.D	N.D
Conclusion	--	--	PASS	PASS	PASS	PASS	PASS

Tested item	Limit (mg/kg)	MDL (mg/kg)	Results (mg/kg)				
			6	7	8	9	10
Aluminium (Al)	28130	20	N.D	N.D	N.D	N.D	40
Antimony (Sb)	560	5	N.D	N.D	N.D	N.D	N.D
Arsenic (As)	47	2	N.D	N.D	N.D	N.D	N.D
Barium (Ba)	18750	20	N.D	N.D	N.D	N.D	N.D
Boron (B)	15000	20	N.D	N.D	N.D	N.D	N.D
Cadmium (Cd)	17	0.5	N.D	N.D	N.D	N.D	N.D
Chromium (III) (Cr ³⁺)*	460	2	N.D	N.D	N.D	N.D	N.D
Chromium (VI) (Cr ⁶⁺)*	0.053	0.01	N.D	N.D	N.D	N.D	N.D
Cobalt (Co)	130	2	N.D	N.D	N.D	N.D	N.D
Copper (Cu)	7700	20	N.D	N.D	N.D	N.D	N.D
Lead (Pb)	23	1	N.D	N.D	N.D	N.D	N.D
Manganese (Mn)	15000	20	N.D	N.D	N.D	N.D	N.D
Mercury (Hg)	94	2	N.D	N.D	N.D	N.D	N.D
Nickel (Ni)	930	5	N.D	N.D	N.D	N.D	N.D
Selenium (Se)	460	5	N.D	N.D	N.D	N.D	N.D
Strontium (Sr)	56000	20	N.D	N.D	N.D	N.D	N.D
Tin (Sn)	180000	4	N.D	N.D	N.D	N.D	N.D
Organic tin #	12	10	N.D	N.D	N.D	N.D	N.D
Zinc (Zn)	46000	20	N.D	N.D	N.D	N.D	N.D
Conclusion	--	--	PASS	PASS	PASS	PASS	PASS

Tested item	Limit (mg/kg)	MDL (mg/kg)	Results (mg/kg)				
			11	12	13	14	15
Aluminium (Al)	28130	20	N.D	N.D	N.D	N.D	N.D
Antimony (Sb)	560	5	N.D	N.D	N.D	N.D	N.D
Arsenic (As)	47	2	N.D	N.D	N.D	N.D	N.D
Barium (Ba)	18750	20	N.D	N.D	N.D	N.D	N.D



Boron (B)	15000	20	N.D	N.D	N.D	N.D	N.D
Cadmium (Cd)	17	0.5	N.D	N.D	N.D	N.D	N.D
Chromium (III) (Cr ³⁺)*	460	2	N.D	N.D	N.D	N.D	N.D
Chromium (VI) (Cr ⁶⁺)*	0.053	0.01	N.D	N.D	N.D	N.D	N.D
Cobalt (Co)	130	2	N.D	N.D	N.D	N.D	N.D
Copper (Cu)	7700	20	N.D	N.D	N.D	N.D	N.D
Lead (Pb)	23	1	N.D	N.D	N.D	N.D	N.D
Manganese (Mn)	15000	20	N.D	N.D	N.D	N.D	N.D
Mercury (Hg)	94	2	N.D	N.D	N.D	N.D	N.D
Nickel (Ni)	930	5	N.D	N.D	N.D	N.D	N.D
Selenium (Se)	460	5	N.D	N.D	N.D	N.D	N.D
Strontium (Sr)	56000	20	N.D	N.D	N.D	N.D	N.D
Tin (Sn)	180000	4	N.D	N.D	N.D	N.D	N.D
Organic tin #	12	10	N.D	N.D	N.D	N.D	N.D
Zinc (Zn)	46000	20	N.D	N.D	N.D	N.D	N.D
Conclusion	--	--	PASS	PASS	PASS	PASS	PASS

Note:

1. mg/kg = milligram per kilogram = ppm (1000mg/kg = 0.1%)
2. MDL = Method Detection Limit
3. N.D = Not Detected (less than MDL)
4. #The MDL for organic tin is the maximum potential value calculated from MDL of soluble tin. when the result of soluble tin multiply 2.44 exceed the MDL 10mg/kg, further confirmation of organic tin test should be conducted by GC-MS method.
5. As described in the test method, all of organic tin results were expressed as tributyltin (TBT).
7. Results shown of sample 1~4 and 6~9 were based on resubmitted materials.

Phthalates content - European regulation (EC) No. 1907/2006 (REACH) annex XVII entry 51 & 52

Test method : With reference to ISO 8124-6:2023, the analysis was performed by GC-MS.

Test item(s)	Limit (mg/kg)	MDL (mg/kg)	Test results (mg/kg)			
			1+2+3	4+5+6	7+8	9+10
Dibutyl phthalate (DBP)	1000	30	N.D	N.D	N.D	N.D
Benzyl butyl phthalate (BBP)	1000	30	N.D	N.D	N.D	N.D
Bis (2-ethylhexyl) phthalate (DEHP)	1000	30	N.D	N.D	N.D	N.D
Diisobutyl phthalate(DIBP)	1000	30	N.D	N.D	N.D	N.D
Sum of (DBP+BBP+DEHP+DIBP)	1000	--	N.D	N.D	N.D	N.D



Diisononyl Phthalate (DINP)	1000	50	N.D	N.D	N.D	N.D
Di-'isodecyl' phthalate (DIDP)	1000	50	N.D	N.D	N.D	N.D
Di-n-octyl phthalate (DNOP)	1000	30	N.D	N.D	N.D	N.D
Sum of (DINP+DIDP+DNOP)	1000	--	N.D	N.D	N.D	N.D
Conclusion	--	--	PASS	PASS	PASS	PASS

Test item(s)	Limit (mg/kg)	MDL (mg/kg)	Test results (mg/kg)			
			11	12+13+14	15	--
Dibutyl phthalate (DBP)	1000	30	N.D	N.D	N.D	--
Benzyl butyl phthalate (BBP)	1000	30	N.D	N.D	N.D	--
Bis (2-ethylhexyl) phthalate (DEHP)	1000	30	N.D	N.D	N.D	--
Diisobutyl phthalate(DIBP)	1000	30	N.D	N.D	N.D	--
Sum of (DBP+BBP+DEHP+DIBP)	1000	--	N.D	N.D	N.D	--
Conclusion	--	--	PASS	PASS	PASS	--

Note:

1. mg/kg = milligram per kilogram = ppm
2. MDL = Method Detection Limit
3. N.D = Not Detected (less than MDL)

Polycyclic Aromatic Hydrocarbons (PAHs) content

Test method : AfPS GS 2019:01 PAK , the analysis was performed by GC-MS.

Test Item(s)	Limit (mg/kg)	MDL (mg/kg)	Result (mg/kg)			
			1+2+3	4+5+6	7+8	9+10
Benzo[a]pyrene	0.5	0.1	N.D	N.D	N.D	N.D
Benzo[e]pyrene	0.5	0.1	N.D	N.D	N.D	N.D
Benzo[a]anthracene	0.5	0.1	N.D	N.D	N.D	N.D
Chrysene	0.5	0.1	N.D	N.D	N.D	N.D
Benzo[b]fluoranthene	0.5	0.1	N.D	N.D	N.D	N.D
Benzo[j]fluoranthene	0.5	0.1	N.D	N.D	N.D	N.D
Benzo[k]fluoranthene	0.5	0.1	N.D	N.D	N.D	N.D
Dibenzo[a,h]anthracene	0.5	0.1	N.D	N.D	N.D	N.D
Conclusion	--	--	PASS	PASS	PASS	PASS



Test Item(s)	Limit (mg/kg)	MDL (mg/kg)	Result (mg/kg)			
			11	12+13+14	15	--
Benzo[a]pyrene	0.5	0.1	N.D	N.D	N.D	--
Benzo[e]pyrene	0.5	0.1	N.D	N.D	N.D	--
Benzo[a]anthracene	0.5	0.1	N.D	N.D	N.D	--
Chrysene	0.5	0.1	N.D	N.D	N.D	--
Benzo[b]fluoranthene	0.5	0.1	N.D	N.D	N.D	--
Benzo[j]fluoranthene	0.5	0.1	N.D	N.D	N.D	--
Benzo[k]fluoranthene	0.5	0.1	N.D	N.D	N.D	--
Dibenzo[a,h]anthracene	0.5	0.1	N.D	N.D	N.D	--
Conclusion	--	--	PASS	PASS	PASS	--

Note:

1. mg/kg = milligram per kilogram = ppm
2. MDL = Method Detection Limit
3. N.D = Not Detected (less than MDL)

Cadmium content

Test method : IEC 62321-5:2013

Instrument used for analysis: ICP-OES

Test item(s)	Limit (mg/kg)	MDL (mg/kg)	Test results (mg/kg)				
			1+2+3	4+5+6	7+8	9+10	11
Cadmium (Cd)	100	5	N.D	N.D	N.D	N.D	N.D
Conclusion	--	--	PASS	PASS	PASS	PASS	PASS

Test item(s)	Limit (mg/kg)	MDL (mg/kg)	Test results (mg/kg)				
			12+13+14	15	--	--	--
Cadmium (Cd)	100	5	N.D	N.D	--	--	--
Conclusion	--	--	PASS	PASS	--	--	--

Note:

1. mg/kg = milligram per kilogram = ppm
2. MDL = Method Detection Limit
3. N.D = Not Detected (less than MDL)

* indicates the test item was not accredited by CNAS.



Photo documentation



*** End of Report ***



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