

Test Report issued under the responsibility of:



Report Number : KPL2312010717059Y-1LC
Date of issue : 2022-04-06
Total number of pages : 10
Applicant : PINGYANG MINGYING ARTS & CRAFTS FACTORY
Address : DIQIAN ROAD, WANQUAN TOWN, PINGYANG COUNTY, WENZHOU CITY, ZHEJIANG PROVINCE
The submitted sample and sample information was/were submitted and identified by/on the behalf of the client
Sample name : CLEANING BRUSH
Testing type / model : N/A
Additional type / model : N/A
Trademark : N/A
Manufacturer : PINGYANG MINGYING ARTS & CRAFTS FACTORY
Address : DIQIAN ROAD, WANQUAN TOWN, PINGYANG COUNTY, WENZHOU CITY, ZHEJIANG PROVINCE
Requested Age Grading : Over 1 years
Sample received date : 2022-03-29
Testing period : 2022-03-29 to 2022-04-06
Test Method : Please refer to next page(s).
Test Result : Please refer to next page(s).
Conclusion : The test results comply with the limits of EU Toys directive 2009/48/EC

Executive Summary:	
TEST REQUEST	CONCLUSION
European Standard on Safety of Toys	
- EN 71-1:2014 + A1:2018 Mechanical and Physical Properties	PASS
- EN 71-2:2020 Flammability of Toys	PASS
- EN 71-3:2019 + A1:2021 Migration of certain elements	PASS
For chemical test, the tested component(s) is/are identified by the applicant.	

*****FOR FURTHER DETAILS, PLEASE REFER TO THE FOLLOWING PAGE(S)*****

Testing procedure and testing location:**Test Laboratory:**

Testing location/ address

Ningbo KPL Technology Co., Ltd

Building No. 599, Jiangnan Road, National Hi-Tech Zone,
Ningbo, Zhejiang, China.

Tested by (name + signature)

Charles Lin



Approved by (name + signature) ..

Andy Fan



Test Result(s):◆ **Mechanical and physical properties****As specified in European Standard on Safety of Toys EN 71 part 1:2014 + A1:2018.**

Clause	Testing items	Assessment
4	General requirements	--
4.1	Material cleanliness	P
4.2	Assembly	N/A
4.3	Flexible plastic sheeting	N/A
4.4	Toy bags	N/A
4.5	Glass	N/A
4.6	Expanding materials	N/A
4.7	Edges	P
4.8	Points and metallic, wires	P
4.9	Protruding parts	N/A
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	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 a child or by other means	N/A
4.15.2	Toy bicycles	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	Toy scooters	N/A
4.16	Heavy immobile toys	N/A
4.17	Projectiles	--
4.17.1	General	N/A
4.17.2	Projectile toys without stored energy	N/A
4.17.3	Projectile toys with stored energy	N/A
4.17.4	Bows and arrows	N/A
4.18	Aquatic toys and inflatable toys	N/A

Clause	Testing items	Assessment
4.19	Percussion caps specifically designed for use in toys and toys using percussion caps	N/A
4.20	Acoustics	N/A
4.21	Toys containing a non-electrical heat source	N/A
4.22	Small balls	N/A
4.23	Magnets	--
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
5	Toys intended for children under 36 months	--
5.1	General requirements	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
5.5	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
6	Packaging	N/A
7	Warnings, markings, and instructions for use	--
7.1	General	N/A
7.2	Toys not intended for children under 36 months	N/A
7.3	Latex balloons	N/A
7.4	Aquatic toys	N/A
7.5	Functional toys	N/A
7.6	Hazardous sharp functional edges and points	--
7.7	Projectiles	N/A
7.7.1	Toys with projectiles which can discharge an object other than that	N/A

Clause	Testing items	Assessment
	provided with the toy	
7.7.2	Toys capable of discharging a projectile with a kinetic energy greater than 0.08 j	N/A
7.8	Imitation protective masks and helmets	N/A
7.9	Toy kites	N/A
7.10	Roller skates, inline skates, skateboards, and certain other ride-on toys	--
7.10.1	Roller skates, inline skates, and skateboards	N/A
7.10.2	Ride-on toys without a braking device	N/A
7.10.3	Electrically-driven ride-on toys	N/A
7.10.4	Instructions for use	N/A
7.11	Toys intended to be attached to or strung across a cradle, cot, or perambulator	N/A
7.12	Liquid-filled teethingers	N/A
7.13	Percussion caps specifically designed for use in toys	N/A
7.14	Acoustics	N/A
7.15	Toy bicycles	N/A
7.16	Toys intended to bear the mass of a child	N/A
7.17	Toys comprising monofilament fibers	N/A
7.18	Toy scooters	N/A
7.19	Rocking horses and similar toys	N/A
7.20	Magnetic/electrical experimental sets	N/A
7.21	Toys with electrical cables exceeding 300 mm in length	N/A
7.22	Toys with cords or chains intended for children of 18 months and over but under 36months	N/A
8	Test Methods	--
8.4	Tension Test	P
8.10	Accessibility of a part or component	P
8.11	Sharpness of edges	P
8.12	Sharpness of points	--
Remark : 1. P=Pass; 2. N/A= Not Applicable; 3. F=Fail		

◆ Flammability of toys

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

Clause	Testing Items	Assessment
4.1	General	P
4.2	Toys to be worn on the head	N/A
4.3	Toy disguise costumes and toys intended to be worn by a child in play	N/A
4.4	Toys intend to be entered by a child	N/A
4.5	Soft filler toys (animal and dolls etc.) With a piled or textile surface	N/A
Remark :	1. P=Pass; 2. N/A= Not Applicable; 3. F=Fail	

Note:

4.1 The following materials shall not be used in the manufacture of 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, and materials with the same behaviour in fire as celluloid. 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 this requirement if the toy meets its appropriate requirements in 4.2 to 4.5;
- Materials with a piled surface which produce surface flash on the approach of a flame. 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;
- Highly flammable solids. In addition, toys shall not contain flammable gases, highly flammable liquids, flammable liquids, flammable gels except as provided for below:
- Flammable liquids, flammable gels and preparations 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 using cup No. 6;
- Highly flammable liquids contained in toys covered in EN 71-5. NOTE: Different legal requirements may exist in non-EU countries.

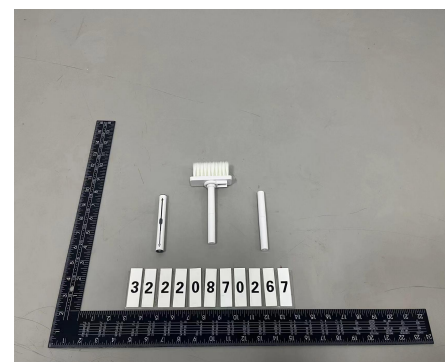
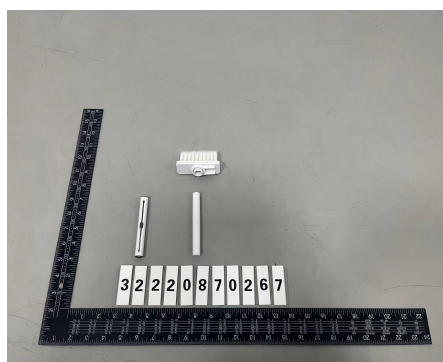
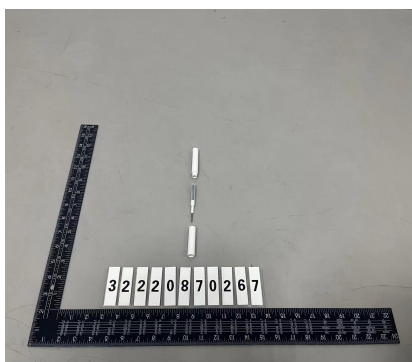
◆ Migration of certain elements

As specified in European standard on safety of toys EN 71 part 3: 2019 + A1:2021 Migration of certain elements, acid extraction method was used and toxic elements content were determined by ICP-OES, ICP-MS, HPLC-ICP-MS, and GC-MS.

Sample Description:

No.	Sample Description/Location
1	Grey plastic
2	White plastic handle
3	White plastic ring
4	Grey soft plastic bristle
5	White soft plastic bristle
6	Grey sponge with white velvet fabric
7	Silvery metal pen nib

Sample Photo:



Test Results:**Migration test**

Test Item(s)	Unit	Result 1	Result 2	Result 3	Result 4	MDL	Limit Cat III
Soluble Aluminium (Al)	mg/kg	N.D.	N.D.	N.D.	N.D.	50	28130
Soluble Antimony(Sb)	mg/kg	N.D.	N.D.	N.D.	N.D.	1.0	560
Soluble Arsenic(As)	mg/kg	N.D.	N.D.	N.D.	N.D.	0.5	47
Soluble Barium(Ba)	mg/kg	N.D.	N.D.	N.D.	N.D.	50	18750
Soluble Boron(B)	mg/kg	N.D.	N.D.	N.D.	N.D.	50	15000
Soluble Cadmium(Cd)	mg/kg	N.D.	N.D.	N.D.	N.D.	0.3	17
Soluble Chromium (III) (Cr III)	mg/kg	N.D.	N.D.	N.D.	N.D.	5	460
Soluble Chromium(VI) (Cr)	mg/kg	N.D.	N.D.	N.D.	N.D.	0.005	0.053
Soluble Cobalt(Co)	mg/kg	N.D.	N.D.	N.D.	N.D.	0.5	130
Soluble Copper(Cu)	mg/kg	N.D.	N.D.	N.D.	N.D.	50	7700
Soluble Lead(Pb)	mg/kg	N.D.	N.D.	N.D.	N.D.	0.5	160
Soluble Manganese(Mn)	mg/kg	N.D.	N.D.	N.D.	N.D.	50	15000
Soluble Mercury(Hg)	mg/kg	N.D.	N.D.	N.D.	N.D.	0.5	94
Soluble Nickel(Ni)	mg/kg	N.D.	N.D.	N.D.	N.D.	10	930
Soluble Selenium(Se)	mg/kg	N.D.	N.D.	N.D.	N.D.	0.08	460
Soluble Strontium(Sr)	mg/kg	N.D.	N.D.	N.D.	N.D.	5.0	56000
Soluble Tin(Sn)	mg/kg	N.D.	N.D.	N.D.	N.D.	50	18000
Organic tin	mg/kg	N.D.	N.D.	N.D.	N.D.	0.2	12
Soluble Zinc(Zn)	mg/kg	N.D.	N.D.	N.D.	N.D.	0.08	46000

Test Item(s)	Unit	Result 5	Result 6	Result 7	MDL	Limit Cat III
Soluble Aluminium (Al)	mg/kg	N.D.	N.D.	N.D.	50	28130
Soluble Antimony(Sb)	mg/kg	N.D.	N.D.	N.D.	1.0	560
Soluble Arsenic(As)	mg/kg	N.D.	N.D.	N.D.	0.5	47
Soluble Barium(Ba)	mg/kg	N.D.	N.D.	N.D.	50	18750

Soluble Boron(B)	mg/kg	N.D.	N.D.	N.D.	50	15000
Soluble Cadmium(Cd)	mg/kg	N.D.	N.D.	N.D.	0.3	17
Soluble Chromium (III) (Cr III)	mg/kg	N.D.	N.D.	N.D.	5	460
Soluble Chromium(VI) (Cr)	mg/kg	N.D.	N.D.	N.D.	0.005	0.053
Soluble Cobalt(Co)	mg/kg	N.D.	N.D.	N.D.	0.5	130
Soluble Copper(Cu)	mg/kg	N.D.	N.D.	N.D.	50	7700
Soluble Lead(Pb)	mg/kg	N.D.	N.D.	N.D.	0.5	160
Soluble Manganese(Mn)	mg/kg	N.D.	N.D.	N.D.	50	15000
Soluble Mercury(Hg)	mg/kg	N.D.	N.D.	N.D.	0.5	94
Soluble Nickel(Ni)	mg/kg	N.D.	N.D.	N.D.	10	930
Soluble Selenium(Se)	mg/kg	N.D.	N.D.	N.D.	0.08	460
Soluble Strontium(Sr)	mg/kg	N.D.	N.D.	N.D.	5.0	56000
Soluble Tin(Sn)	mg/kg	N.D.	N.D.	N.D.	50	18000
Organic tin	mg/kg	N.D.	N.D.	N.D.	0.2	12
Soluble Zinc(Zn)	mg/kg	N.D.	N.D.	N.D.	0.08	46000

Organic tin test

Test Item(s)	Unit	Result 1	Result 2	Result 3	Result 4	MDL	Limit Cat III
Methyl tin	mg/kg	N.D.	N.D.	N.D.	N.D.	0.5	12
Butyl tin	mg/kg	N.D.	N.D.	N.D.	N.D.	0.5	
Dibutyl tin	mg/kg	N.D.	N.D.	N.D.	N.D.	0.5	
Tributyl tin	mg/kg	N.D.	N.D.	N.D.	N.D.	0.5	
Tetrabutyl tin	mg/kg	N.D.	N.D.	N.D.	N.D.	0.5	
n-Octyl tin	mg/kg	N.D.	N.D.	N.D.	N.D.	0.5	
Di-n-octyl tin	mg/kg	N.D.	N.D.	N.D.	N.D.	0.5	
Di-n-propyl tin	mg/kg	N.D.	N.D.	N.D.	N.D.	0.5	
Diphenyl tin	mg/kg	N.D.	N.D.	N.D.	N.D.	0.5	
Triphenyl tin	mg/kg	N.D.	N.D.	N.D.	N.D.	0.5	

Dimethyl tin	mg/kg	N.D.	N.D.	N.D.	N.D.	0.5	
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Test Item(s)	Unit	Result 5	Result 6	Result 7	MDL	Limit Cat III
Methyl tin	mg/kg	N.D.	N.D.	N.D.	0.5	12
Butyl tin	mg/kg	N.D.	N.D.	N.D.	0.5	
Dibutyl tin	mg/kg	N.D.	N.D.	N.D.	0.5	
Tributyl tin	mg/kg	N.D.	N.D.	N.D.	0.5	
Tetrabutyl tin	mg/kg	N.D.	N.D.	N.D.	0.5	
n-Octyl tin	mg/kg	N.D.	N.D.	N.D.	0.5	
Di-n-octyl tin	mg/kg	N.D.	N.D.	N.D.	0.5	
Di-n-propyl tin	mg/kg	N.D.	N.D.	N.D.	0.5	
Diphenyl tin	mg/kg	N.D.	N.D.	N.D.	0.5	
Triphenyl tin	mg/kg	N.D.	N.D.	N.D.	0.5	
Dimethyl tin	mg/kg	N.D.	N.D.	N.D.	0.5	

Note:

- mg/= ppm;
- N.D.=No Detection(<MDL);
- MDL =Method Detection Limit;
- Category I: Dry, brittle, powder like or pliable materials;
- Category II: Liquid or sticky materials;
- Category III: Scraped-off materials.

---End of Report---