



**Applicant** : GUANGZHOU PRODIGY DAILY-PRODUCTION CO., LTD.  
ROOM 101, BUILDING #3, NO.120, BEILONG ROAD, DAGANG TOWN, NANSHA DISTRICT, GUANGZHOU, CHINA.

**Sample Description** : Safety gate

**Style No.** : SG002

**Country of Origin** : CHINA

**Test Sample Receipt Date, Location** : 2021-07-05, 2021-07-19, 2021-09-22, 2021-10-07, 2021-10-14, 2021-10-18, Guangzhou

**Test Period, Location** : From 2021-07-09 to 2021-07-26, Shenzhen;  
From 2021-09-23 to 2021-10-09, Shenzhen;  
From 2021-10-14 to 2021-10-20, Shenzhen

**Test Result(s)** : Refer to Section 3

**Purpose of Examination / Conclusion:**

No.	Test Item(s)	Conclusion
1.	<b>EN 71-3:2019 – Migration of certain elements</b>	Pass
2.	<b>EN 71-3:2019 + A1:2021 – Migration of certain elements</b>	Pass
3.	<b>Organotin Compounds</b> Regulation (EC) No.1907/2006 (REACH) and its amendment Regulation (EC) No. 552/2009 (REACH) Annex XVII, Entry 20	Pass
4.	<b>Polycyclic Aromatic Hydrocarbons (PAHs)</b> Regulation (EC) No.1907/2006 and its amendment (EU) No. 1272/2013 Regulation (EC) No. 552/2009 Annex XVII, Entry 50	Pass
5.	<b>Phthalates</b> Regulation (EC) No.1907/2006 and its amendment Regulation (EC) No. 2018/2005 (REACH) Annex XVII, Entry 51 and 52.	Pass
6.	<b>Total Cadmium</b> Regulation (EU) 2016/217, amending Annex XVII to Regulation (EC) No. 1907/2006 Entry 23.	Pass
7.	<b>Mechanical and Physical Properties</b> Test in accordance EN 1930:2011 Child use and care articles - Safety barriers - Safety requirements and test methods	Pass

**Laboratory:**

TüV Süd Certification and Testing (China) Co., Ltd.  
Shenzhen Branch  
Building 12&13, Zhiheng Wisdomland Business Park,  
Nantou Checkpoint Road 2, 518052, P.R China

Phone : +86 20 3832 0668

Fax: (86) 20 38320478

E-mail: toys\_hardline@tuvsud.com

Web : <http://www.tuvsud.cn>

**Regd. Office:**

TüV Süd Certification and Testing (China) Co., Ltd.  
Guangzhou Branch 5F, Communication Building  
163 Pingyun Rd, Huangpu West Ave,  
Guangzhou 510656, P.R. China

**Test Report No.: 64.452.21.0453.02**

**Dated: 2021-10-20**



Remarks:

- (1) The results relate only to the items tested.
- (2) Samples are tested as received.
- (3) Test items and samples were specified by the client.
- (4) "Pass" means the measured result is within a limit, even when extended by expanded uncertainty. "Fail" means the measured result is beyond a limit, even when extended by expanded uncertainty. "Inconclusive" means the measured result can be within or beyond a limit when extended by expanded uncertainty. The confidence level of the expanded uncertainty for "Pass", "Fail" and "Inconclusive" is 95%.

TÜV SÜD Certification and Testing (China) Co., Ltd. Guangzhou Branch  
TÜV SÜD Group

Prepared by:

Reviewed by:

Handwritten signature of Yvonne Huang in black ink.

Handwritten signature of Winnie Wu in black ink.

Huang, Yvonne  
Senior Project Coordinator

Wu, Winnie  
Section Manager

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.

**Laboratory:**

TÜV SÜD Certification and Testing (China) Co., Ltd.  
Shenzhen Branch  
Building 12&13, Zhiheng Wisdomland Business Park,  
Nantou Checkpoint Road 2, 518052, P.R China

Phone : +86 20 3832 0668

Fax: (86) 20 38320478

E-mail: toys\_hardline@tuvsud.com

Web : <http://www.tuvsud.cn>

**Regd. Office:**


TÜV SÜD Certification and Testing (China) Co., Ltd.  
Guangzhou Branch 5F, Communication Building  
163 Pingyun Rd, Huangpu West Ave,  
Guangzhou 510656, P.R. China

1. Description of the Test Sample:

Sample Description	Safety gate
--------------------	-------------

2. List of Materials as identified by the Laboratory:

T. No.	Sample No.	Colour and Description	Photograph
T1	001	Black plastic (parts)	
T2	002	White coating (on metal)	
T3	004	Transparent plastic with green coating (button)	
T4	005	Transparent plastic with red coating (button)	
T5	006	Black printed white soft plastic with adhesive (label)	

T. No.	Sample No.	Colour and Description	Photograph
T6	007	Red sticker	
T7	008	Grey plastic (button)	
T8	009	Green sticker	
T9	010	Safety gate – SG002 (Finished product)	

**Laboratory:**

TÜV SÜD Certification and Testing (China) Co., Ltd.  
Shenzhen Branch  
Building 12&13, Zhiheng Wisdomland Business Park,  
Nantou Checkpoint Road 2, 518052, P.R China

Phone : +86 20 3832 0668

Fax: (86) 20 38320478

E-mail: toys\_hardline@tuvsud.com

Web : <http://www.tuvsud.cn>

**Regd. Office:**

TÜV SÜD Certification and Testing (China) Co., Ltd.  
Guangzhou Branch 5F, Communication Building  
163 Pingyun Rd, Huangpu West Ave,  
Guangzhou 510656, P.R. China

### 3. Test Results

#### 3.1 Migration of certain elements

Directive 2009/48/EC and its amendment Commission Directive (EU) 2019/1922 on the Safety of Toys

Sample preparation in accordance with EN 71-3 : 2019 Migration of certain elements.

As stated in the above specifications. Heavy metal analysis was determined by Inductively Coupled Plasma Optical Emission Spectrometry (ICP-OES), Liquid Chromatography-Inductively Coupled Plasma Mass Spectrometry (LC-ICP-MS).

Migration Elements	Results [mg/kg]			Maximum Permissible Limits [mg/kg]
	Sample 001	Sample 002	Sample 004	Category 3
Soluble Aluminum	5.38	25.9	<5.00	28130
Soluble Antimony	<5.00	<5.00	<5.00	560
Soluble Arsenic	<2.50	<2.50	<2.50	47
Soluble Barium	<5.00	509	<5.00	18750
Soluble Boron	<5.00	<5.00	<5.00	15000
Soluble Cadmium	<5.00	<5.00	<5.00	17
Soluble Chromium	<0.15	1.23	2.14	-
Soluble Chromium III	<0.15 <sup>#1</sup>	1.23 <sup>#1</sup>	2.14 <sup>#1</sup>	460
Soluble Chromium VI	<0.04 <sup>#1</sup>	<0.04 <sup>#1</sup>	<0.04 <sup>#1</sup>	0.053
Soluble Cobalt	<5.00	<5.00	<5.00	130
Soluble Copper	<5.00	<5.00	<5.00	7700
Soluble Lead	<5.00	<5.00	9.76	23
Soluble Manganese	<5.00	<5.00	<5.00	15000
Soluble Mercury	<5.00	<5.00	<5.00	94
Soluble Nickel	<5.00	<5.00	<5.00	930
Soluble Selenium	<5.00	<5.00	<5.00	460
Soluble Strontium	<5.00	<5.00	<5.00	56000
Soluble Tin	<3.00	<3.00	4.25	180000
Organic Tin	<7.50 <sup>#2</sup>	<7.50 <sup>#2</sup>	8.74 <sup>#3</sup>	12
Soluble Zinc	9.55	45.4	12.0	46000
<b>Conclusion</b>	Pass	Pass	Pass	-

Note: 1. "<" denotes less than

2. "mg/kg" denotes milligram per kilogram

3. <sup>#1</sup> denotes Chromium (VI) is determined by LC-ICP-MS and Chromium (III) is calculated by [Total chromium - Chromium (VI)].

4. <sup>#2</sup> denotes Organic Tin is determined by screening of total Tin express as Tributyl Tin

4. <sup>#3</sup> denotes Organic Tin is determined by GC-MS

#### Laboratory:

TÜV SÜD Certification and Testing (China) Co., Ltd.  
Shenzhen Branch  
Building 12&13, Zhiheng Wisdomland Business Park,  
Nantou Checkpoint Road 2, 518052, P.R China

Phone : +86 20 3832 0668

Fax: (86) 20 38320478

E-mail: toys\_hardline@tuvsud.com

Web : <http://www.tuvsud.cn>

#### Regd. Office:

TÜV SÜD Certification and Testing (China) Co., Ltd.  
Guangzhou Branch 5F, Communication Building  
163 Pingyun Rd, Huangpu West Ave,  
Guangzhou 510656, P.R. China



### 3.1 Migration of certain elements

Directive 2009/48/EC and its amendment Commission Directive (EU) 2019/1922 on the Safety of Toys

Sample preparation in accordance with EN 71-3 : 2019 Migration of certain elements.

As stated in the above specifications. Heavy metal analysis was determined by Inductively Coupled Plasma Optical Emission Spectrometry (ICP-OES), Liquid Chromatography-Inductively Coupled Plasma Mass Spectrometry (LC-ICP-MS).

Migration Elements	Results [mg/kg]			Maximum Permissible Limits [mg/kg]
	Sample 005	Sample 006	Sample 007*	Category 3
Soluble Aluminum	5.86	84.1	NA	28130
Soluble Antimony	<5.00	<5.00	NA	560
Soluble Arsenic	<2.50	<2.50	NA	47
Soluble Barium	25.0	<5.00	NA	18750
Soluble Boron	<5.00	<5.00	NA	15000
Soluble Cadmium	<5.00	<5.00	NA	17
Soluble Chromium	<0.15	<0.15	NA	-
Soluble Chromium III	<0.15	<0.15	NA	460
Soluble Chromium VI	<0.04 <sup>#1</sup>	<0.04 <sup>#1</sup>	NA	0.053
Soluble Cobalt	<5.00	<5.00	NA	130
Soluble Copper	<5.00	<5.00	NA	7700
Soluble Lead	<5.00	<5.00	NA	23
Soluble Manganese	<5.00	<5.00	NA	15000
Soluble Mercury	<5.00	<5.00	NA	94
Soluble Nickel	<5.00	<5.00	NA	930
Soluble Selenium	<5.00	<5.00	NA	460
Soluble Strontium	<5.00	21.4	NA	56000
Soluble Tin	<3.00	<3.00	NA	180000
Organic Tin	<7.50 <sup>#2</sup>	<7.50 <sup>#2</sup>	NA	12
Soluble Zinc	10.2	7.46	NA	46000
<b>Conclusion</b>	Pass	Pass	Pass	-

Note: 1. "<" denotes less than

2. "mg/kg" denotes milligram per kilogram

3. "\*" denotes test specimen less than 10 milligram is not required to test the soluble migrated elements according to EN71-3:2019

4. "NA" denotes Not Applicable

5. "#1" denotes Chromium (VI) is determined by LC-ICP-MS and Chromium (III) is calculated by [Total chromium - Chromium (VI)].

6. "#2" denotes Organic Tin is determined by screening of total Tin express as Tributyl Tin

**Laboratory:**

TÜV SÜD Certification and Testing (China) Co., Ltd.  
Shenzhen Branch  
Building 12&13, Zhiheng Wisdomland Business Park,  
Nantou Checkpoint Road 2, 518052, P.R China

Phone : +86 20 3832 0668

Fax: (86) 20 38320478

E-mail: toys\_hardline@tuvsud.com

Web : <http://www.tuvsud.cn>

**Regd. Office:**

TÜV SÜD Certification and Testing (China) Co., Ltd.  
Guangzhou Branch 5F, Communication Building  
163 Pingyun Rd, Huangpu West Ave,  
Guangzhou 510656, P.R. China

### 3.1 Migration of certain elements

Directive 2009/48/EC and its amendment Commission Directive (EU) 2019/1922 on the Safety of Toys

Sample preparation in accordance with EN 71-3 : 2019 Migration of certain elements.

As stated in the above specifications. Heavy metal analysis was determined by Inductively Coupled Plasma Optical Emission Spectrometry (ICP-OES), Liquid Chromatography-Inductively Coupled Plasma Mass Spectrometry (LC-ICP-MS).

Migration Elements	Results [mg/kg]		Maximum Permissible Limits [mg/kg]
	Sample 008	Sample 009*	Category 3
Soluble Aluminum	<5.00	NA	28130
Soluble Antimony	<5.00	NA	560
Soluble Arsenic	<2.50	NA	47
Soluble Barium	<5.00	NA	18750
Soluble Boron	<5.00	NA	15000
Soluble Cadmium	<5.00	NA	17
Soluble Chromium	<0.15	NA	-
Soluble Chromium III	<0.15 <sup>#1</sup>	NA	460
Soluble Chromium VI	<0.04 <sup>#1</sup>	NA	0.053
Soluble Cobalt	<5.00	NA	130
Soluble Copper	<5.00	NA	7700
Soluble Lead	<5.00	NA	23
Soluble Manganese	<5.00	NA	15000
Soluble Mercury	<5.00	NA	94
Soluble Nickel	<5.00	NA	930
Soluble Selenium	<5.00	NA	460
Soluble Strontium	<5.00	NA	56000
Soluble Tin	<3.00	NA	180000
Organic Tin	<7.50 <sup>#2</sup>	NA	12
Soluble Zinc	<5.00	NA	46000
<b>Conclusion</b>	Pass	Pass	-

Note: 1. "<" denotes less than

2. "mg/kg" denotes milligram per kilogram

3. "\*" denotes test specimen less than 10 milligram is not required to test the soluble migrated elements according to EN71-3:2019

4. "NA" denotes Not Applicable

5. "#1" denotes Chromium (VI) is determined by LC-ICP-MS and Chromium (III) is calculated by [Total chromium - Chromium (VI)].

6. "#2" denotes Organic Tin is determined by screening of total Tin express as Tributyl Tin

**Laboratory:**

TÜV SÜD Certification and Testing (China) Co., Ltd.  
Shenzhen Branch  
Building 12&13, Zhiheng Wisdomland Business Park,  
Nantou Checkpoint Road 2, 518052, P.R China

Phone : +86 20 3832 0668

Fax: (86) 20 38320478

E-mail: toys\_hardline@tuvsud.com

Web : <http://www.tuvsud.cn>

**Regd. Office:**

TÜV SÜD Certification and Testing (China) Co., Ltd.  
Guangzhou Branch 5F, Communication Building  
163 Pingyun Rd, Huangpu West Ave,  
Guangzhou 510656, P.R. China

### 3.2 Migration of certain elements

Directive 2009/48/EC on the Safety of Toys

Sample preparation in accordance with EN 71-3:2019 + A1:2021 Migration of certain elements.

As stated in the above specifications. Heavy metal analysis was determined by Inductively Coupled Plasma Optical Emission Spectrometry (ICP-OES), Liquid Chromatography-Inductively Coupled Plasma Mass Spectrometry (LC-ICP-MS).

Migration Elements	Results [mg/kg]			Maximum Permissible Limits [mg/kg]
	Sample 001	Sample 002	Sample 004	Category 3
Soluble Aluminum	5.38	25.9	<5.00	28130
Soluble Antimony	<5.00	<5.00	<5.00	560
Soluble Arsenic	<2.50	<2.50	<2.50	47
Soluble Barium	<5.00	509	<5.00	18750
Soluble Boron	<5.00	<5.00	<5.00	15000
Soluble Cadmium	<5.00	<5.00	<5.00	17
Soluble Chromium	<0.15	1.23	2.14	-
Soluble Chromium III	<0.15 <sup>#1</sup>	1.23 <sup>#1</sup>	2.14 <sup>#1</sup>	460
Soluble Chromium VI	<0.04 <sup>#1</sup>	<0.04 <sup>#1</sup>	<0.04 <sup>#1</sup>	0.053
Soluble Cobalt	<5.00	<5.00	<5.00	130
Soluble Copper	<5.00	<5.00	<5.00	7700
Soluble Lead	<5.00	<5.00	9.76	23
Soluble Manganese	<5.00	<5.00	<5.00	15000
Soluble Mercury	<5.00	<5.00	<5.00	94
Soluble Nickel	<5.00	<5.00	<5.00	930
Soluble Selenium	<5.00	<5.00	<5.00	460
Soluble Strontium	<5.00	<5.00	<5.00	56000
Soluble Tin	<3.00	<3.00	4.25	180000
Organic Tin	<7.50 <sup>#2</sup>	<7.50 <sup>#2</sup>	8.74 <sup>#3</sup>	12
Soluble Zinc	9.55	45.4	12.0	46000
<b>Conclusion</b>	Pass	Pass	Pass	-

Note: 1. "<" denotes less than

2. "mg/kg" denotes milligram per kilogram

3. "#1" denotes Chromium (VI) is determined by LC-ICP-MS and Chromium (III) is calculated by [Total chromium - Chromium (VI)].

4. "#2" denotes Organic Tin is determined by screening of total Tin express as Tributyl Tin

4. "#3" denotes Organic Tin is determined by GC-MS

**Laboratory:**

TÜV SÜD Certification and Testing (China) Co., Ltd.  
Shenzhen Branch  
Building 12&13, Zhiheng Wisdomland Business Park,  
Nantou Checkpoint Road 2, 518052, P.R China

Phone : +86 20 3832 0668

Fax: (86) 20 38320478

E-mail: toys\_hardline@tuvsud.com

Web : http://www.tuvsud.cn

**Regd. Office:**

TÜV SÜD Certification and Testing (China) Co., Ltd.  
Guangzhou Branch 5F, Communication Building  
163 Pingyun Rd, Huangpu West Ave,  
Guangzhou 510656, P.R. China



### 3.2 Migration of certain elements

Directive 2009/48/EC on the Safety of Toys

Sample preparation in accordance with EN 71-3:2019 + A1:2021 Migration of certain elements.

As stated in the above specifications. Heavy metal analysis was determined by Inductively Coupled Plasma Optical Emission Spectrometry (ICP-OES), Liquid Chromatography-Inductively Coupled Plasma Mass Spectrometry (LC-ICP-MS).

Migration Elements	Results [mg/kg]			Maximum Permissible Limits [mg/kg]
	Sample 005	Sample 006	Sample 007*	Category 3
Soluble Aluminum	5.86	84.1	NA	28130
Soluble Antimony	<5.00	<5.00	NA	560
Soluble Arsenic	<2.50	<2.50	NA	47
Soluble Barium	25.0	<5.00	NA	18750
Soluble Boron	<5.00	<5.00	NA	15000
Soluble Cadmium	<5.00	<5.00	NA	17
Soluble Chromium	<0.15	<0.15	NA	-
Soluble Chromium III	<0.15	<0.15	NA	460
Soluble Chromium VI	<0.04 <sup>#1</sup>	<0.04 <sup>#1</sup>	NA	0.053
Soluble Cobalt	<5.00	<5.00	NA	130
Soluble Copper	<5.00	<5.00	NA	7700
Soluble Lead	<5.00	<5.00	NA	23
Soluble Manganese	<5.00	<5.00	NA	15000
Soluble Mercury	<5.00	<5.00	NA	94
Soluble Nickel	<5.00	<5.00	NA	930
Soluble Selenium	<5.00	<5.00	NA	460
Soluble Strontium	<5.00	21.4	NA	56000
Soluble Tin	<3.00	<3.00	NA	180000
Organic Tin	<7.50 <sup>#2</sup>	<7.50 <sup>#2</sup>	NA	12
Soluble Zinc	10.2	7.46	NA	46000
<b>Conclusion</b>	Pass	Pass	Pass	-

- Note: 1. "<" denotes less than  
 2. "mg/kg" denotes milligram per kilogram  
 3. "\*" denotes test specimen less than 10 milligram is not required to test the soluble migrated elements according to EN 71-3:2019+A1:2021  
 4. "NA" denotes Not Applicable  
 5. "<sup>#1</sup>" denotes Chromium (VI) is determined by LC-ICP-MS and Chromium (III) is calculated by [Total chromium - Chromium (VI)].  
 6. "<sup>#2</sup>" denotes Organic Tin is determined by screening of total Tin express as Tributyl Tin

**Laboratory:**

TÜV SÜD Certification and Testing (China) Co., Ltd.  
 Shenzhen Branch  
 Building 12&13, Zhiheng Wisdomland Business Park,  
 Nantou Checkpoint Road 2, 518052, P.R China

Phone : +86 20 3832 0668

Fax: (86) 20 38320478

E-mail: toys\_hardline@tuvsud.com

Web : <http://www.tuvsud.cn>

**Regd. Office:**

TÜV SÜD Certification and Testing (China) Co., Ltd.  
 Guangzhou Branch 5F, Communication Building  
 163 Pingyun Rd, Huangpu West Ave,  
 Guangzhou 510656, P.R. China

### 3.2 Migration of certain elements

Directive 2009/48/EC on the Safety of Toys

Sample preparation in accordance with EN 71-3:2019 + A1:2021 Migration of certain elements.

As stated in the above specifications. Heavy metal analysis was determined by Inductively Coupled Plasma Optical Emission Spectrometry (ICP-OES), Liquid Chromatography-Inductively Coupled Plasma Mass Spectrometry (LC-ICP-MS).

Migration Elements	Results [mg/kg]		Maximum Permissible Limits [mg/kg]
	Sample 008	Sample 009*	Category 3
Soluble Aluminum	<5.00	NA	28130
Soluble Antimony	<5.00	NA	560
Soluble Arsenic	<2.50	NA	47
Soluble Barium	<5.00	NA	18750
Soluble Boron	<5.00	NA	15000
Soluble Cadmium	<5.00	NA	17
Soluble Chromium	<0.15	NA	-
Soluble Chromium III	<0.15 <sup>#1</sup>	NA	460
Soluble Chromium VI	<0.04 <sup>#1</sup>	NA	0.053
Soluble Cobalt	<5.00	NA	130
Soluble Copper	<5.00	NA	7700
Soluble Lead	<5.00	NA	23
Soluble Manganese	<5.00	NA	15000
Soluble Mercury	<5.00	NA	94
Soluble Nickel	<5.00	NA	930
Soluble Selenium	<5.00	NA	460
Soluble Strontium	<5.00	NA	56000
Soluble Tin	<3.00	NA	180000
Organic Tin	<7.50 <sup>#2</sup>	NA	12
Soluble Zinc	<5.00	NA	46000
<b>Conclusion</b>	Pass	Pass	-

- Note: 1. "<" denotes less than  
 2. "mg/kg" denotes milligram per kilogram  
 3. "\*" denotes test specimen less than 10 milligram is not required to test the soluble migrated elements according to EN71-3:2019+A1:2021  
 4. "NA" denotes Not Applicable  
 5. "#1" denotes Chromium (VI) is determined by LC-ICP-MS and Chromium (III) is calculated by [Total chromium - Chromium (VI)].  
 6. "#2" denotes Organic Tin is determined by screening of total Tin express as Tributyl Tin

**Laboratory:**

TÜV SÜD Certification and Testing (China) Co., Ltd.  
 Shenzhen Branch  
 Building 12&13, Zhiheng Wisdomland Business Park,  
 Nantou Checkpoint Road 2, 518052, P.R China

Phone : +86 20 3832 0668

Fax: (86) 20 38320478

E-mail: toys\_hardline@tuvsud.com

Web : http://www.tuvsud.cn

**Regd. Office:**

TÜV SÜD Certification and Testing (China) Co., Ltd.  
 Guangzhou Branch 5F, Communication Building  
 163 Pingyun Rd, Huangpu West Ave,  
 Guangzhou 510656, P.R. China



### 3.3 Organotin Compounds

Regulation (EC) No.1907/2006 (REACH) and its amendment Regulation (EC) No. 552/2009 (REACH) Annex XVII, Entry 20

In house method test with reference to DIN EN ISO 17353:2005, solvent extraction with acidified methanol, followed by derivatization and GC-MS analysis

[Reporting Limit = 0.025mg/kg]

Compounds	CAS No.	Result
		Sample 002
Diocetyltn (DOT)	250252-87-0 94410-05-6 3542-36-7	<0.025
Dibutyltin (DBT)	14488-53-0 1002-53-5 683-18-1	<0.025
Tributyltin (TBT)	36643-28-4 1461-22-9	<0.025
Triphenyltin (TPhT)	668-34-8 639-58-7	<0.025
Triocetyltn chloride (TOT)	2587-76-0	<0.025
Tricyclohexyltin chloride (TcyT)	36580-86-6 3091-32-5	<0.025
Tripropyltin (TPrT)	2279-76-7	<0.025
<b>Limit</b>		<1000
<b>Conclusion</b>		Pass

Note:

1. "mg/kg" denotes milligram per kilogram
2. "<" denotes less than

**Laboratory:**

TÜV SÜD Certification and Testing (China) Co., Ltd.  
Shenzhen Branch  
Building 12&13, Zhiheng Wisdomland Business Park,  
Nantou Checkpoint Road 2, 518052, P.R China

Phone : +86 20 3832 0668

Fax: (86) 20 38320478

E-mail: toys\_hardline@tuvsud.com

Web : <http://www.tuvsud.cn>

**Regd. Office:**

TÜV SÜD Certification and Testing (China) Co., Ltd.  
Guangzhou Branch 5F, Communication Building  
163 Pingyun Rd, Huangpu West Ave,  
Guangzhou 510656, P.R. China

### 3.4 Polycyclic Aromatic Hydrocarbons (PAHs)

Regulation (EC) No.1907/2006 and its amendment (EU) No. 1272/2013

Regulation (EC) No. 552/2009 Annex XVII, Entry 50

Test with reference to AfPS GS 2019:01 PAK Solvent extraction followed by GC-MS analysis

[Reporting Limit = 0.1mg/kg]

PAHs	CAS No.	Results [mg/kg]		
		Sample 001+008	Sample 002	Sample 004+005
Benzo[a]anthracene	56-55-3	<0.1	<0.1	<0.1
Chrysene	218-01-9	<0.1	<0.1	<0.1
Benzo[b]fluoranthene	205-99-2	<0.1	<0.1	<0.1
Benzo[j]fluoranthene	205-82-3	<0.1	<0.1	<0.1
Benzo[k]fluoranthene	207-08-9	<0.1	<0.1	<0.1
Benzo[a]pyrene	50-32-8	<0.1	<0.1	<0.1
Benzo[e]pyrene	192-97-2	<0.1	<0.1	<0.1
dibenzo[ah]anthracene	53-70-3	<0.1	<0.1	<0.1
<b>Limit</b>		Toys: each <0.5 mg/kg		
<b>Conclusion</b>		Pass	Pass	Pass

PAHs	CAS No.	Results [mg/kg]	
		Sample 006	Sample 007+009
Benzo[a]anthracene	56-55-3	<0.1	<0.1
Chrysene	218-01-9	<0.1	<0.1
Benzo[b]fluoranthene	205-99-2	<0.1	<0.1
Benzo[j]fluoranthene	205-82-3	<0.1	<0.1
Benzo[k]fluoranthene	207-08-9	<0.1	<0.1
Benzo[a]pyrene	50-32-8	<0.1	<0.1
Benzo[e]pyrene	192-97-2	<0.1	<0.1
dibenzo[ah]anthracene	53-70-3	<0.1	<0.1
<b>Limit</b>		Toys: each <0.5 mg/kg	
<b>Conclusion</b>		Pass	Pass

Note: 1. "mg/kg" denotes milligram per kilogram

2. "<" denotes less than

3. Limit: 0.5 mg/kg for Toys (including activity toys): Childcare articles, 1.0 mg/kg for sports equipment such as bicycles, golf clubs, racquets; House-hold utensils, trolleys, walking frames; tools for domestic use; Clothing footwear, gloves and sportswear; Watch-straps wrist-bands, masks, head-bands.

**Laboratory:**

TÜV SÜD Certification and Testing (China) Co., Ltd.  
Shenzhen Branch  
Building 12&13, Zhiheng Wisdomland Business Park,  
Nantou Checkpoint Road 2, 518052, P.R China

Phone : +86 20 3832 0668

Fax: (86) 20 38320478

E-mail: toys\_hardline@tuvsud.com

Web : <http://www.tuvsud.cn>

**Regd. Office:**

TÜV SÜD Certification and Testing (China) Co., Ltd.  
Guangzhou Branch 5F, Communication Building  
163 Pingyun Rd, Huangpu West Ave,  
Guangzhou 510656, P.R. China

### 3.5 Phthalates.

Regulation (EC) No.1907/2006 and its amendment

Regulation (EC) No. 2018/2005 (REACH) Annex XVII, Entry 51 and 52.

Solvent extraction and GC-MS analysis.

[Reporting Limit = 0.005%]

Phthalates	CAS No.	Results [%]			Limit [%]
		Sample 001+008	Sample 002	Sample 004+005	
Bis (2-ethylhexyl) phthalate, DEHP	117-81-7	<0.005	<0.005	<0.005	Sum of DEHP, DBP, BBP and DIBP <0.1 <sup>#1,#3</sup>
Dibutyl phthalate, DBP	84-74-2	<0.005	<0.005	<0.005	
Benzyl butyl phthalate, BBP	85-68-7	<0.005	<0.005	<0.005	
Diisobutylphthalate, DIBP	84-69-5	<0.005	<0.005	<0.005	
<b>Sum of DBP, BBP, DEHP, DIBP</b>	-	<0.005	<0.005	<0.005	
Di-isononyl phthalate, DINP	28553-12-0, 68515-48-0	<0.005	<0.005	<0.005	Sum of DINP, DIDP and DNOP <0.1 <sup>#2</sup>
Di-isodecyl phthalate, DIDP	26761-40-0, 68515-49-1	<0.005	<0.005	<0.005	
Di-n-octyl phthalate, DNOP	117-84-0	<0.005	<0.005	<0.005	
<b>Sum of DINP, DIDP, DNOP</b>	-	<0.005	<0.005	<0.005	
<b>Conclusion</b>		Pass	Pass	Pass	-

Note: 1. "<" denotes less than.

2. "%" denotes percentage by weight.

3. <sup>#1</sup> denotes the limit of DEHP, DBP, BBP and DIBP for toys and child care articles.

4. <sup>#2</sup> denotes the limit of DINP, DIDP and DNOP for toys and child care articles that can be placed in the mouth.

5. <sup>#3</sup> denotes the limit of DEHP, DBP, BBP and DIBP for plasticized material in articles.

**Laboratory:**

TÜV SÜD Certification and Testing (China) Co., Ltd.  
Shenzhen Branch  
Building 12&13, Zhiheng Wisdomland Business Park,  
Nantou Checkpoint Road 2, 518052, P.R China

Phone : +86 20 3832 0668

Fax: (86) 20 38320478

E-mail: toys\_hardline@tuvsud.com

Web : http://www.tuvsud.cn

**Regd. Office:**

TÜV SÜD Certification and Testing (China) Co., Ltd.  
Guangzhou Branch 5F, Communication Building  
163 Pingyun Rd, Huangpu West Ave,  
Guangzhou 510656, P.R. China



### 3.5 Phthalates.

Regulation (EC) No.1907/2006 and its amendment

Regulation (EC) No. 2018/2005 (REACH) Annex XVII, Entry 51 and 52.

Solvent extraction and GC-MS analysis.

[Reporting Limit = 0.005%]

Phthalates	CAS No.	Results [%]		Limit [%]
		Sample 006	Sample 007+009	
Bis (2-ethylhexyl) phthalate, DEHP	117-81-7	<0.005	<0.005	Sum of DEHP, DBP, BBP and DIBP <0.1 <sup>#1,#3</sup>
Dibutyl phthalate, DBP	84-74-2	<0.005	<0.005	
Benzyl butyl phthalate, BBP	85-68-7	<0.005	<0.005	
Diisobutylphthalate, DIBP	84-69-5	<0.005	<0.005	
<b>Sum of DBP, BBP, DEHP, DIBP</b>	-	<0.005	<0.005	
Di-isononyl phthalate, DINP	28553-12-0, 68515-48-0	<0.005	<0.005	Sum of DINP, DIDP and DNOP <0.1 <sup>#2</sup>
Di-isodecyl phthalate, DIDP	26761-40-0, 68515-49-1	<0.005	<0.005	
Di-n-octyl phthalate, DNOP	117-84-0	<0.005	<0.005	
<b>Sum of DINP, DIDP, DNOP</b>	-	<0.005	<0.005	
<b>Conclusion</b>		Pass	Pass	-

Note: 1. "<" denotes less than.

2. "%" denotes percentage by weight.

3. <sup>#1</sup> denotes the limit of DEHP, DBP, BBP and DIBP for toys and child care articles.

4. <sup>#2</sup> denotes the limit of DINP, DIDP and DNOP for toys and child care articles that can be placed in the mouth.

5. <sup>#3</sup> denotes the limit of DEHP, DBP, BBP and DIBP for plasticized material in articles.

**Laboratory:**

TÜV SÜD Certification and Testing (China) Co., Ltd.  
Shenzhen Branch  
Building 12&13, Zhiheng Wisdomland Business Park,  
Nantou Checkpoint Road 2, 518052, P.R China

Phone : +86 20 3832 0668

Fax: (86) 20 38320478

E-mail: toys\_hardline@tuvsud.com

Web : http://www.tuvsud.cn

**Regd. Office:**

TÜV SÜD Certification and Testing (China) Co., Ltd.  
Guangzhou Branch 5F, Communication Building  
163 Pingyun Rd, Huangpu West Ave,  
Guangzhou 510656, P.R. China



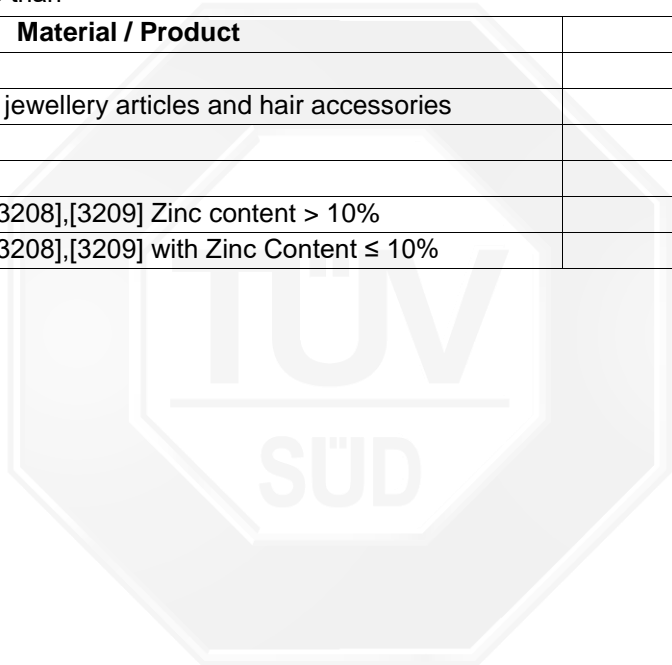
**3.6 Total Cadmium**

Regulation (EU) 2016/217, amending Annex XVII to Regulation (EC) No. 1907/2006 Entry 23.  
 Microwave digestion and followed by Atomic Absorption Spectrophotometer (AAS) or Inductively Coupled Plasma Optical Emission Spectrophotometer (ICP-OES)  
 [Reporting Limit = 10.0mg/kg]

Analyte	CAS No.	Sample No	Result [mg/kg]	Limit [mg/kg]	Conclusion
Cadmium	7440-43-9	001+008	<10.0	<100	Pass
Cadmium	7440-43-9	002	<10.0	<1000	Pass
Cadmium	7440-43-9	004+005	<10.0	<100	Pass
Cadmium	7440-43-9	006	<10.0	<100	Pass
Cadmium	7440-43-9	007+009	<10.0	<100	Pass

Note: 1. "mg/kg" denotes milligram per kilogram  
 2. "<" denotes less than

Material / Product	Limit
Plastics	<100 mg/kg
Metal jewellery / imitation jewellery articles and hair accessories	<100 mg/kg
Brazing Fillers	<100 mg/kg
Coating	<1000 mg/kg
Paint with TARIC codes [3208],[3209] Zinc content > 10%	<1000 mg/kg
Paint with TARIC codes [3208],[3209] with Zinc Content ≤ 10%	<100 mg/kg



**Laboratory:**

TÜV SÜD Certification and Testing (China) Co., Ltd.  
 Shenzhen Branch  
 Building 12&13, Zhiheng Wisdomland Business Park,  
 Nantou Checkpoint Road 2, 518052, P.R China

Phone : +86 20 3832 0668

Fax: (86) 20 38320478

E-mail: toys\_hardline@tuvsud.com

Web : <http://www.tuvsud.cn>

**Regd. Office:**

TÜV SÜD Certification and Testing (China) Co., Ltd.  
 Guangzhou Branch 5F, Communication Building  
 163 Pingyun Rd, Huangpu West Ave,  
 Guangzhou 510656, P.R. China



**3.7 Mechanical and Physical Properties**

Test in accordance with EN 1930:2011

Sample 010		
Clause	Title/ Description	Remark*
6	Mechanical hazards	
6.1	The test shall be carried out in ambient conditions of (23±10) °C. Unless otherwise specified the tests shall be carried out on the same safety barrier in the order listed in this European Standard.	
6.2	Barrier function	C
6.3	Gaps	C^
6.4	Opening and closing system	C^
6.5	Entrapment hazards	C
6.6	Shearing and crushing hazards	C
6.7	Protrusion hazards	C^
6.8	Chocking and ingestion hazards	C^
6.9	Suffocation hazards	NA
6.10	Hazardous edges and points	C
6.11	Structural integrity	C
6.12	Security of safety barrier from impact test	C^
7	Chemical hazards	C (Refer to section 3.1 and 3.2)
8	Thermal hazards	NA
9	Additional hazards	
9.1	Use of a tool	NA
9.2	Toy accessories	C
10	Product information	
10.1	General	C
10.2	Marking	C
10.3	Purchase information	C^
10.4	Instructions for use	C^

\* Abbreviation: C = Complied, NA = Not Applicable

Remark: "A" denotes retested result.

-- END OF THE TEST REPORT --

**Laboratory:**

TÜV SÜD Certification and Testing (China) Co., Ltd.  
Shenzhen Branch  
Building 12&13, Zhiheng Wisdomland Business Park,  
Nantou Checkpoint Road 2, 518052, P.R China

Phone : +86 20 3832 0668

Fax: (86) 20 38320478

E-mail: toys\_hardline@tuvsud.com

Web : http://www.tuvsud.cn

**Regd. Office:**

TÜV SÜD Certification and Testing (China) Co., Ltd.  
Guangzhou Branch 5F, Communication Building  
163 Pingyun Rd, Huangpu West Ave,  
Guangzhou 510656, P.R. China