



# Test Report

Report No. A2210112962102

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**Company Name** NINGBO TONGLU CHILDREN PRODUCT CO.,LTD  
**shown on Report**  
**Address** NO 19, PUQUAN ROAD, XIAPU INDUSTRY ZONE, NINGBO, CHINA

**The following sample(s) and sample information was/were submitted and identified by/on the behalf of the applicant**

**Sample Name** Kids Table and Chair Set  
**Item No.** TL-T201、TL-C201、TL-TC201、TL-T202、TL-C202、TL-TC202、TL-T203、  
TL-C203、TL-TC203、TL-T205、TL-C205A、TL-TC205、TL-T110、TL-C110、  
TL-TC110、TL-T204、TL-C204-1、TL-TC204、TL-TC204-1、TL-C204-2、  
TL-C205A、TL-C205B、TL-C205C、TL-C205D、TL-C205E、TL-C206、  
TL-C207、TL-T208、TL-T209、TL-T301、TL-C201、TL-S301、TL-S302、  
TL-S303、TL-S302、TL-S304  
**Manufacturer** Ningbo Tonglu Children Product Co.,Ltd  
**Country of Origin** China  
**Quantity Of Sample** 1 Set  
**Sample Received Date** Mar. 31, 2021  
**Testing Period** Mar. 31, 2021 to Apr. 8, 2021

**Test Conducted:**

As requested by the applicant. For details refer to next page(s)



Date Apr. 8, 2021 No. S214001956

Centre Testing International Pinbiao(Shanghai) Co., Ltd. No.1351, Wanfang Road, Minhang District, Shanghai, China

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**Executive Summary:**

**TEST REQUEST**

**CONCLUSION**

1) EN 71-3:2019 European Standard on Safety of Toys	
- Migration of certain elements	<b>PASS</b>
2) AS/NZS ISO 8124.3:2012/Amdt 1:2016 Safety of toys - Part 3: Migration of certain elements	
- Migration of certain elements	<b>PASS</b>
3) GB 6675.4-2014 Safety of toys - Part 4: Migration of certain elements	
- Migration of certain elements	<b>PASS</b>
4) ISO 8124-3:2020 Safety of toys - Part 3:Migration of certain elements	
- Migration of certain elements	<b>PASS</b>
5) ASTM F963-17 Standard Consumer Safety Specification for Toy Safety	
- Clause 4.3.5 Heavy elements – Migration of certain elements	<b>PASS</b>

\*\*\*\*\* For further details, please refer to the following page(s) \*\*\*\*\*

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## 1) EN 71-3:2019 European Standard on Safety of Toys

### ▼ Migration of certain elements

Method(s) EN 71-3:2019 was/were used, and the item(s) was/were analyzed by ICP-OES, ICP-MS,IC-UV and/or GC-MS.

### Category III: scraped-off toy material

Tested Item(s)	Result (mg/kg)				MDL (mg/kg)	Limit (mg/kg)
	001	002	003	004		
Aluminium (Al)	N.D.	983	1021	N.D.	50	70000
Antimony (Sb)	N.D.	N.D.	N.D.	N.D.	5	560
Arsenic (As)	N.D.	N.D.	N.D.	N.D.	5	47
Barium (Ba)	N.D.	N.D.	N.D.	N.D.	50	18750
Boron (B)	N.D.	N.D.	N.D.	N.D.	50	15000
Cadmium (Cd)	N.D.	N.D.	N.D.	N.D.	1	17
Chromium (Cr)	0.067	0.205	0.266	0.250	0.004	--
Chromium (III) #1	0.067	0.205	0.266	0.250	--	460
Chromium (VI)	N.D.	N.D.	N.D.	N.D.	0.005	0.053
Cobalt (Co)	N.D.	N.D.	N.D.	N.D.	5	130
Copper (Cu)	N.D.	N.D.	N.D.	N.D.	50	7700
Lead (Pb)	N.D.	N.D.	N.D.	N.D.	5	23
Manganese (Mn)	N.D.	N.D.	N.D.	N.D.	50	15000
Mercury (Hg)	N.D.	N.D.	N.D.	N.D.	5	94
Nickel (Ni)	N.D.	N.D.	N.D.	N.D.	5	930
Selenium (Se)	N.D.	N.D.	N.D.	N.D.	5	460
Strontium (Sr)	N.D.	N.D.	N.D.	N.D.	50	56000
Tin (Sn) #2	N.D.	N.D.	N.D.	N.D.	2	180000
Organic tin (TBT) #3	--	--	--	--	1	12
Zinc (Zn)	N.D.	719	N.D.	N.D.	50	46000

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<u>Tested Item(s)</u>	<u>Result (mg/kg)</u>			<u>MDL</u> (mg/kg)	<u>Limit</u> (mg/kg)
	005	006	007		
Aluminium (Al)	N.D.	N.D.	N.D.	50	70000
Antimony (Sb)	N.D.	N.D.	N.D.	5	560
Arsenic (As)	N.D.	N.D.	N.D.	5	47
Barium (Ba)	N.D.	N.D.	N.D.	50	18750
Boron (B)	N.D.	N.D.	N.D.	50	15000
Cadmium (Cd)	N.D.	N.D.	N.D.	1	17
Chromium (Cr)	0.116	0.119	0.178	0.004	--
Chromium (III) #1	0.116	0.119	0.178	--	460
Chromium (VI)	N.D.	N.D.	N.D.	0.005	0.053
Cobalt (Co)	N.D.	N.D.	N.D.	5	130
Copper (Cu)	N.D.	N.D.	N.D.	50	7700
Lead (Pb)	N.D.	N.D.	N.D.	5	23
Manganese (Mn)	N.D.	87	N.D.	50	15000
Mercury (Hg)	N.D.	N.D.	N.D.	5	94
Nickel (Ni)	N.D.	N.D.	N.D.	5	930
Selenium (Se)	N.D.	N.D.	N.D.	5	460
Strontium (Sr)	N.D.	N.D.	N.D.	50	56000
Tin (Sn) #2	N.D.	N.D.	N.D.	2	180000
Organic tin (TBT) #3	--	--	--	1	12
Zinc (Zn)	N.D.	N.D.	N.D.	50	46000

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Remark:

- MDL = Method Detection Limit
- N.D. = Not Detected (<MDL)
- mg/kg = ppm = parts per million
- Filter paper was used instead of membrane filter in lab testing.
- Where the test portion has a mass of between 10mg and 100mg, the quantity of the appropriate elements shall be calculated as if 100mg of the test portion had been used.
- <sup>#1</sup> Trivalent chromium (Cr (III)) = Chromium (Cr) - Hexavalent chromium (Cr (VI)).
- <sup>#2</sup> Tin (Sn) content can be used for screen test for organic tins analysis to show compliance with the requirement of EN 71-3:2019.
- <sup>#3</sup> The migration of organic tin is expressed as tributyltin (TBT). Where the tin content exceeded the limit of organic tin, eleven organic tins listed in the table were determined by GC-MS and the client should note there are other organic tins that may be present in toy materials.

Organic tins tested under EN 71-3:2019
Methyl tin (MeT)
Butyl tin (BuT)
Dibutyl tin (DBT)
Tributyl tin (TBT)
Tetrabutyl tin (TeBT)
n-Octyl tin (MOT)
Di-n-octyl tin (DOT)
Di-n-propyl tin (DProT)
Diphenyl tin (DPhT)
Triphenyl tin (TPhT)
Dimethyl tin (DMT)

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## 2) AS/NZS ISO 8124.3:2012/Amdt 1:2016 Safety of toys - Part 3: Migration of certain elements

### ▼ Migration of certain elements

Method(s) AS/NZS 8124.3:2012/Amdt 1:2016 was/were used, and the item(s) was/were analyzed by ICP-OES.

<u>Tested Item(s)</u>	<u>Result (mg/kg)</u>				<u>MDL (mg/kg)</u>	<u>Limit (mg/kg)</u>
	001	002	003	004		
Soluble Antimony (Sb)	N.D.	N.D.	N.D.	N.D.	5	60
Soluble Arsenic (As)	N.D.	N.D.	N.D.	N.D.	2.5	25
Soluble Barium (Ba)	N.D.	N.D.	N.D.	N.D.	5	1000
Soluble Cadmium (Cd)	N.D.	N.D.	N.D.	N.D.	5	75
Soluble Chromium (Cr)	N.D.	N.D.	N.D.	N.D.	2.5	60
Soluble Lead (Pb)	N.D.	N.D.	N.D.	N.D.	5	90
Soluble Mercury (Hg)	N.D.	N.D.	N.D.	N.D.	2.5	60
Soluble Selenium (Se)	N.D.	N.D.	N.D.	N.D.	5	500

<u>Tested Item(s)</u>	<u>Result (mg/kg)</u>			<u>MDL (mg/kg)</u>	<u>Limit (mg/kg)</u>
	005	006	007		
Soluble Antimony (Sb)	N.D.	N.D.	N.D.	5	60
Soluble Arsenic (As)	N.D.	N.D.	N.D.	2.5	25
Soluble Barium (Ba)	N.D.	9	N.D.	5	1000
Soluble Cadmium (Cd)	N.D.	N.D.	N.D.	5	75
Soluble Chromium (Cr)	N.D.	N.D.	N.D.	2.5	60
Soluble Lead (Pb)	N.D.	N.D.	N.D.	5	90
Soluble Mercury (Hg)	N.D.	N.D.	N.D.	2.5	60
Soluble Selenium (Se)	N.D.	N.D.	N.D.	5	500

### Remark:

- MDL = Method Detection Limit
- N.D. = Not Detected (<MDL)
- mg/kg = ppm = parts per million
- Result(s) shown are of adjusted analytical results by subtracting analytical correction factor.
- Filter paper was used instead of 0.45µm membrane filter in lab testing.
- Where the test portion has a mass of between 10mg and 100mg the quantity of the appropriate elements shall be calculated as if 100mg of the test portion had been used.

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### 3) GB 6675.4-2014 Safety of toys - Part 4: Migration of certain elements

#### ▼ Migration of certain elements

Method(s) GB 6675.4-2014 was/were used, and the item(s) was/were analyzed by ICP-OES.

Tested Item(s)	Result (mg/kg)					MDL (mg/kg)	Limit (mg/kg)
	001	002	003	004	005		
Soluble Antimony (Sb)	N.D.	N.D.	N.D.	N.D.	N.D.	5	60
Soluble Arsenic (As)	N.D.	N.D.	N.D.	N.D.	N.D.	2.5	25
Soluble Barium (Ba)	N.D.	N.D.	N.D.	N.D.	N.D.	5	1000
Soluble Cadmium (Cd)	N.D.	N.D.	N.D.	N.D.	N.D.	5	75
Soluble Chromium (Cr)	N.D.	N.D.	N.D.	N.D.	N.D.	2.5	60
Soluble Lead (Pb)	N.D.	N.D.	N.D.	N.D.	N.D.	5	90
Soluble Mercury (Hg)	N.D.	N.D.	N.D.	N.D.	N.D.	2.5	60
Soluble Selenium (Se)	N.D.	N.D.	N.D.	N.D.	N.D.	5	500

Tested Item(s)	Result (mg/kg)		MDL (mg/kg)	Limit (mg/kg)
	006	007		
Soluble Antimony (Sb)	N.D.	N.D.	5	60
Soluble Arsenic (As)	N.D.	N.D.	2.5	25
Soluble Barium (Ba)	9	N.D.	5	1000
Soluble Cadmium (Cd)	N.D.	N.D.	5	75
Soluble Chromium (Cr)	N.D.	N.D.	2.5	60
Soluble Lead (Pb)	N.D.	N.D.	5	90
Soluble Mercury (Hg)	N.D.	N.D.	2.5	60
Soluble Selenium (Se)	N.D.	N.D.	5	500

#### Remark:

- MDL = Method Detection Limit
- N.D. = Not Detected (<MDL)
- mg/kg = ppm = parts per million
- Result(s) shown are of adjusted analytical results by subtracting analytical correction factor.
- Filter paper was used instead of 0.45µm membrane filter in lab testing.
- Where the test portion has a mass of between 10mg and 100mg the quantity of the appropriate elements shall be calculated as if 100mg of the test portion had been used.

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## 4) ISO 8124-3:2020 Safety of toys - Part 3:Migration of certain elements

### ▼ Migration of certain elements

Method(s) ISO 8124-3:2020 was/were used, and the item(s) was/were analyzed by .

<u>Tested Item(s)</u>	<u>Result (mg/kg)</u>				<u>MDL (mg/kg)</u>	<u>Limit (mg/kg)</u>
	001	002	003	004		
Soluble Antimony (Sb)	N.D.	N.D.	N.D.	N.D.	5	60
Soluble Arsenic (As)	N.D.	N.D.	N.D.	N.D.	2.5	25
Soluble Barium (Ba)	N.D.	N.D.	N.D.	N.D.	5	1000
Soluble Cadmium (Cd)	N.D.	N.D.	N.D.	N.D.	5	75
Soluble Chromium (Cr)	N.D.	N.D.	N.D.	N.D.	2.5	60
Soluble Lead (Pb)	N.D.	N.D.	N.D.	N.D.	5	90
Soluble Mercury (Hg)	N.D.	N.D.	N.D.	N.D.	2.5	60
Soluble Selenium (Se)	N.D.	N.D.	N.D.	N.D.	5	500

<u>Tested Item(s)</u>	<u>Result (mg/kg)</u>			<u>MDL (mg/kg)</u>	<u>Limit (mg/kg)</u>
	005	006	007		
Soluble Antimony (Sb)	N.D.	N.D.	N.D.	5	60
Soluble Arsenic (As)	N.D.	N.D.	N.D.	2.5	25
Soluble Barium (Ba)	N.D.	9	N.D.	5	1000
Soluble Cadmium (Cd)	N.D.	N.D.	N.D.	5	75
Soluble Chromium (Cr)	N.D.	N.D.	N.D.	2.5	60
Soluble Lead (Pb)	N.D.	N.D.	N.D.	5	90
Soluble Mercury (Hg)	N.D.	N.D.	N.D.	2.5	60
Soluble Selenium (Se)	N.D.	N.D.	N.D.	5	500

### Remark:

- MDL = Method Detection Limit
- N.D. = Not Detected (<MDL)
- mg/kg = ppm = parts per million
- Result(s) shown are of adjusted analytical results by subtracting analytical correction factor.
- Filter paper was used instead of 0.45µm membrane filter in lab testing.
- Where the test portion has a mass of between 10mg and 100mg, the quantity of the appropriate elements shall be calculated as if 100mg of the test portion had been used.



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## 5) ASTM F963-17 Standard Consumer Safety Specification for Toy Safety

### ▼ Clause 4.3.5 Heavy elements – Migration of certain elements

Method(s) ASTM F963-17 Clause 8.3 was/were used, and the item(s) was/were analyzed by ICP-OES.

Tested Item(s)	Result (mg/kg)							MDL	Limit
	001	002	003	004	005	006	007	(mg/kg)	(mg/kg)
Soluble Antimony (Sb)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	5	60
Soluble Arsenic (As)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	2.5	25
Soluble Barium (Ba)	N.D.	N.D.	N.D.	N.D.	N.D.	9	N.D.	5	1000
Soluble Cadmium (Cd)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	5	75
Soluble Chromium (Cr)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	2.5	60
Soluble Lead (Pb)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	5	90
Soluble Mercury (Hg)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	2.5	60
Soluble Selenium (Se)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	5	500

#### Remark:

- MDL = Method Detection Limit
- N.D. = Not Detected (<MDL)
- mg/kg = ppm = parts per million
- Results shown of soluble elements are of adjusted analytical results by subtracting analytical Correction factor
- Filter paper was used instead of 0.45µm membrane filter in lab testing.
- Where the test portion has a mass of between 10mg and 100mg, the quantity of the appropriate elements shall be calculated as if 100mg of the test portion had been used.

Note: The testing data and result(s) in this report is(are) just for scientific research, education, internal quality control and product development etc.

#### Sample/Part Description

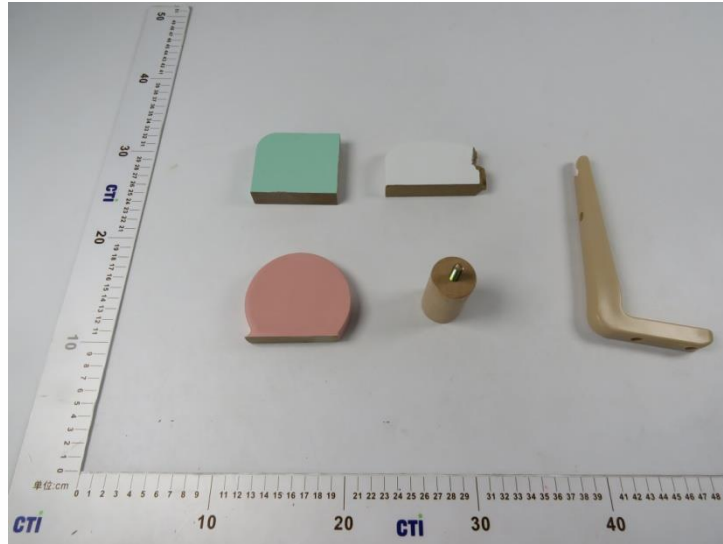
- 001 Pink coating
- 002 Green coating
- 003 White coating
- 004 Transparent lacquer (sample weight: 60.7mg)
- 005 Beige wood
- 006 Brown MDF
- 007 Brown plastic

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## Photo(s) of the sample(s)



### Statement:

1. This report is considered invalid without approved signature, special seal and the seal on the perforation;
2. The Company Name shown on Report and Address, the sample(s) and sample information was/were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified;
3. The result(s) shown in this report refer(s) only to the sample(s) tested;
4. Without written approval of CTI, this report can't be reproduced except in full.

\*\*\* End of Report \*\*\*