

**Products** 

TÜVRheinland®
Precisely Right.

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Client: HAPPY ARTS&CRAFTS(NINGBO)CO., LTD

HAPE INTERNATIONAL (NINGBO) LTD.

9-27Nanhai Road, Dagang Industrial City, Beilun, Ningbo, China

**Test item(s):** Toy

Identification / Model No(s):

Details please refer to page 2

Sample Receiving Date: 2013-06-03

**Testing Period:** 2013-06-04 – 2013-06-07 & 2013-06-20

Test result:

1. ASTM F963- 11: Mechanical and physical

2. ASTM F963- 11: Flammability on solid and soft toys

3. ASTM F963- 11 Sect. 4.3.5.1, CPSIA Sect. 101: Total lead content in paint and coating materials

4. ASTM F963-11 Sect. 4.3.5.2, CPSIA Sect. 101: Total lead content in substrate materials

5. ASTM F963-11 Sect. 4.3.5.1 and 4.3.5.2: Soluble heavy metal

PASS

#### Other information:

Exported to: Global

The provided age grade of the item: Over 3 years of age The appropriate age grade of the item: Over 3 years of age

The item was tested for the age of over 3 years.

For and on behalf of TÜV Rheinland (Shanghai) Co., Ltd.

2013-06-26 Wice Wang / Section Manager

Date Name/Position

Test result is drawn according to the kind and extent of tests performed.

This test report relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products.



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NO.	ItemNO.	Age Group	Item Description
1	E3133,E3133A	3Y+	Ice Cream Treats
2	E0319,E0319A	3Y+	Happy Grand Piano, Pink
3	3 E0320,E0320A		Happy Grand Piano, Black
4	E1504,E1504A	3Y+	Numbers Puzzle

# **Material list**

M. No	Material	Color	Location	Remark
M001	Coating	Pink	On wood	8 soluble elements refer to Q00224282-1/M010 Pb refer to Q00237065-1/M019
M002	Coating	White	On wood	8 soluble refer to Q00219261- 1/M002 Pb refer to Q00224377-2/M009
M003	Coating	Black	On wood	8 soluble elements refer to Q00224282-1/M014 Pb refer to Q00224377-2/M008
M004	Plastic	Black	ABS button	8 soluble elements refer to Q00236857-1/M038, Pb refer to Q00237536-1/M015
M005	Plastic	White	ABS button	8 soluble elements refer to Q00236857-1/M039, Pb refer to Q00237536-1/M016
M006	Wood	Nature	MDF	8 soluble elements refer to Q00219261-1/M006 Pb refer to Q00237536-1/M019
M007	Wood	Nature	Solid wood poplar	Refer to Q00236857-1/M100
M008	Coating	Red	On wood	8 soluble elements refer to Q00224282-1/M001 Pb refer to Q00224377-2/M001
M009	Coating	Yellow	On wood	8 soluble elements refer to Q00219261-1/M003 Pb refer to Q00224377-2/M003
M010	Coating	Lt. green	On wood	8 soluble elements refer to Q00224282-1/M005 Pb refer to Q00224377-2/M005



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M011	Coating	Dk.blue	On wood	8 soluble elements refer to Q00224282-1/M008 Pb refer to Q00232550-1/M010
M012	Coating	Lt.purple	On wood	8 soluble elements refer Q00233695-1/M008, Pb refer to Q00237065-2/M017
M013	Coating	Brown	On wood	8 soluble elements refer to Q00224282-1/M045 Pb refer to Q00232550-1/M013
M014	Coating	Transparent	On wood	8 soluble elements refer to Q00219261-1/M004 Pb refer to Q00224377-2/M011
M015	Coating	Orange	On wood	8 soluble elements refer to Q00224282-1/M002 Pb refer to Q00224377-2/M002
M016	Coating	Yellow green	On wood	8 soluble elements refer to Q00224282-1/M004 Pb refer to Q00224377-2/M004
M017	Coating	Cream	on wood(<10mg)	
M018	Wood	Nature	Plywood	8 soluble elements refer to Q00219261-1/M005 Pb refer to Q00224377-2/M017
M019	Wood	Nature	solid wood schima	8 soluble elements refer to Q00236857-1/M098
M020	Textile	White	Elastic string( terylene )	8 soluble elements refer to Q00224282-1/M033, Pb refer to Q00237076-1/M022
M021	Plastic + adhesive	transparent	Glue	8 soluble elements refer to Q00226839-1/M106, Pb refer to Q00237065-1/M021
M022	Textile	Brown	Non-woven cloth, ice cream	8 soluble elements refer to Q00236857-1/M063
M023	Textile	Cream	Non-woven cloth, ice cream	8 soluble elements refer to Q00236857-1/M064
M024	Textile	White	Fabric, ice cream ball	8 soluble elements refer to Q00236857-1/M065
M025	Textile	Orange	Fabric, ice cream ball	8 soluble elements refer to Q00236857-1/M066
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M026	Textile	Bright pink	Fabric, ice cream ball	8 soluble elements refer to Q00236857-1/M067
M027	Textile	Dk. brown	Fabric, ice cream ball	8 soluble elements refer to Q00236857-1/M068
M028	Plastic + Textile	White	Velcro hook	8 soluble elements refer to Q00234080-1/M049
M029	Textile	White	Velcro loop	8 soluble elements refer to Q00234080-1/M050
M030	Textile	Red/White	Sewn-in label	8 soluble elements refer to Q00233695-1/M043
M031	Metal	Silver	Long screw on stick	
M032	Metal	Silver	Base screw	
M033	Metal	Silver	Screw on piano	
M034	Metal	Black	Screw on piano	
M035	Metal	Silver	Support mechanism	
M036	Whole Product	Multi-color	Ice Cream Treats	
M037	Whole Product	Multi-color	Happy Grand Piano, Pink	
M038	Whole Product	Multi-color	Happy Grand Piano, Black	
M039	Whole Product	Multi-color	Numbers Puzzle	



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# 1. ASTM F963- 11: Mechanical and physical

#### Test result:

Test No:	T001
Material No:	M001
4. Safety requirements	
4.1 Material Quality (visual check)	PASS
4.7 Accessible edges	PASS
4.8 Projections	PASS
4.9 Accessible points	PASS
4.11 Nails and fasteners	PASS
4.12 Plastic film	PASS
4.27 Stuffed and beanbag-type toys	PASS
5. Labeling requirements	
5.2 Age grading labeling	PASS
6. Instructional literature	
6.1 Definition and description	PASS
7. Producer's markings	
7.1 Name and address of the producer or the distributor (Producer's markings)	PASS

Т	est No: T002
Mate	rial No: M002
4. Safety requirements	
4.1 Material Quality (visual check)	PASS
4.6 Small objects	PASS
4.7 Accessible edges	PASS
4.9 Accessible points	PASS
4.11 Nails and fasteners	PASS
4.13 Folding mechanisms and hinges	PASS
4.15 Stability and over-load requirements (#)	PASS
5. Labeling requirements	
5.2 Age grading labeling	PASS
5.3 Safety labeling requirements	PASS
5.8 Toys intended to be assembled by an adult	PASS
6. Instructional literature	
6.1 Definition and description	PASS
6.4 Toys intended to be assembled by an adult	PASS
7. Producer's markings	
7.1 Name and address of the producer or the distributor (Prod markings)	lucer's PASS



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Tes	st No: T003
Materia	
4. Safety requirements	1000
4.1 Material Quality (visual check)	PASS
4.6 Small objects	PASS
4.7 Accessible edges	PASS
4.9 Accessible points	PASS
4.11 Nails and fasteners	PASS
4.13 Folding mechanisms and hinges	PASS
4.15 Stability and over-load requirements (#)	PASS
5. Labeling requirements	
5.2 Age grading labeling	PASS
5.3 Safety labeling requirements	PASS
5.8 Toys intended to be assembled by an adult	PASS
6. Instructional literature	
6.1 Definition and description	PASS
6.4 Toys intended to be assembled by an adult	PASS
7. Producer's markings	
7.1 Name and address of the producer or the distributor (Production markings)	cer's PASS

Test No.	T004
Material No.	M004
4. Safety requirements	
4.1 Material Quality (visual check)	PASS
4.6 Small objects	
4.7 Accessible edges	PASS
4.9 Accessible points	PASS
5. Labeling requirements	
5.2 Age grading labeling	PASS
5.3 Safety labeling requirements	PASS
5.11 Small objects, small balls, marbles and balloons	PASS
6. Instructional literature	
6.1 Definition and description	PASS
7. Producer's markings	
7.1 Name and address of the producer or the distributor (Producer's markings)	PASS

# Remark:

N.B.: Only applicable clauses were shown.



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# 2. ASTM F963- 11: Flammability on solid and soft toys

Test result:

Flammability on solids and soft toys PASS
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The burning rate of the most severe part = 0.03 Inch/sec.

Note: Maximum permissible burning rate = 0.1 Inch/sec.

Abbreviation: DNI = Did Not Ignite



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# 3. ASTM F963- 11 Sect. 4.3.5.1, CPSIA Sect. 101: Total lead content in paint and coating materials Test result:

ASTM F963-11 Sect. 4.3.5.1	Total lead content in paint and coating materials	PASS
CPSIA Sect. 101	Total lead content in paint and coating materials	PASS

Test method:

CPSC-CH-E1003-09.1 (Microwave method)

Test result:

Test No.	Material No.	Test Parameter	Unit	RL	Regulatory requirement	Test Result	Conclusion
T001	M001	Lead content	ppm	10	90	n.d.	Pass
T002	M002	Lead content	ppm	10	90	n.d.	Pass
T003	M003	Lead content	ppm	10	90	n.d.	Pass
T004	M008	Lead content	ppm	10	90	n.d.	Pass
T005	M009	Lead content	ppm	10	90	n.d.	Pass
T006	M010	Lead content	ppm	10	90	n.d.	Pass
T007	M011	Lead content	ppm	10	90	n.d.	Pass
T008	M012	Lead content	ppm	10	90	n.d.	Pass
T009	M013	Lead content	ppm	10	90	n.d.	Pass
T010	M014	Lead content	ppm	10	90	n.d.	Pass
T011	M015	Lead content	ppm	10	90	n.d.	Pass
T012	M016	Lead content	ppm	10	90	23	Pass
T013	M017	Lead content	ppm	10	90	n.d.	Pass

Abbreviation: n.d. = Not Detected (< RL)

RL = Reporting Limit ppm = parts per million

Remark: \*1 Requirement according to Consumer Product Safety Improvement Act 2008 Public Law 110-314, section 101, is summarized below:

Effective Date	Maximum Permissible Limit Lead in paint and similar surface coating
1 year after enactment/ 14 Aug 2009	90 ppm



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#### 4. ASTM F963-11 Sect. 4.3.5.2, CPSIA Sect. 101: Total lead content in substrate materials

#### Test result:

ASTM F963-11 Sect. 4.3.5.2	Total lead content in substrate materials	PASS
CPSIA Sect. 101	Total lead content in substrate materials	PASS

Test method:

CPSC-CH-E1001-08.2 and CPSC-CH-E1002-08.2 (Microwave method)

Test result:

Test No.	Material No.	Test Parameter	Unit	RL	Regulatory requirement	Test Result	Conclusion
T001	M004	Lead content	ppm	10	100	n.d.	Pass
T002	M005	Lead content	ppm	10	100	n.d.	Pass
T003	M006	Lead content	ppm	10	100	n.d.	Pass
T004	M018	Lead content	ppm	10	100	n.d.	Pass
T005	M020	Lead content	ppm	10	100	n.d.	Pass
T006	M021	Lead content	ppm	10	100	23	Pass
T007	M028	Lead content	ppm	10	100	n.d.	Pass
T008	M031	Lead content	ppm	10	100	n.d.	Pass
T009	M032	Lead content	ppm	10	100	n.d.	Pass
T010	M033	Lead content	ppm	10	100	90	Pass
T011	M034	Lead content	ppm	10	100	n.d.	Pass
T012	M035	Lead content	ppm	10	100	78	Pass

Abbreviation: n.d. = Not Detected (< RL)

RL = Reporting Limit ppm = parts per million

Remark: \*1 Requirement according to Consumer Product Safety Improvement Act 2008 Public Law 110-314, section 101, is summarized below:

Effective Date	Maximum Permissible Limit Lead in accessible substrate materials
180 days after enactment/10 Feb 2009	600 ppm
1 year after enactment/14 Aug 2009	300 ppm
3 years after enactment/14 Aug 2011 (CPSC extends the Stay of Enforcement for testing and certification until 31 Dec 2011)	100 ppm

- \*2 According to Consumer Product Safety Commission, exemptions for lead as used in certain parts of children's electronic devices, the following lead-containing components are granted the exemptions:
  - a) Glass of cathode ray tubes, electronic components and fluorescent tubes



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- b) As an alloying element in steel, the maximum amount of lead shall be less than 0.35% by weight (3,500 ppm);
- c) Used the manufacture of aluminum, the maximum amount of lead shall be less than 0.4% by weight (4,000 ppm);
- d) Used in copper-based alloys, the maximum amount of lead shall be less than 4% by weight (40,000 ppm);
- e) Lead-bronze bearing shells and bushings;
- f) Compliant pin connector systems;
- g) Optical and filter glass;
- Lead oxide in plasma display panels (PDP) and surface conduction electron emitter displays (SED) used in structural elements; notably in the front and rear glass dielectric layer, the bus electrode, the black stripe, the address electrode, the barrier ribs, the seal frit and frit ring as well as in print pastes;
- i) Lead oxide in the glass envelope of Black Light Blue (BLB) lamps;
- i) Components of electronic devices that are removable or replaceable.
- According to Consumer Product Safety Commission, the following materials are exempted based on they are untreated and unadulterated with respect to the addition of materials or chemicals, including pigments, dyes, coatings, finishes or any other substance, and that do not undergo any processing that could result in the addition of lead into the product or material:
  - a) Precious gemstones: diamond, ruby, sapphire or emeralds;
  - b) Semiprecious gemstones provided that the mineral or material is not based on lead and is not associated with mineral based on lead or lead compounds;
  - c) Natural or cultured pearls;
  - d) Wood;
  - e) Paper and similar materials made from wood or cellulosic fiber;
  - f) Dyed or undyed textiles (cotton, wool, hemp, nylon, yam, etc.);
  - g) CMYK process printing inks;
  - h) Other plant-derived and animal-derived materials including coral, amber, feathers, fur, leather, etc.:
  - Surgical steel and other stainless steel within the designations of Unified Numbering System, UNS S13800-S66286, not including the stainless steel designated as 303Pb(UNS S30360);
  - j) Precious metals like gold (at least 10 karat), sterling silver (at least 925/1000), platinum, palladium, rhodium, osmium, iridium, ruthenium and titanium.
- \*4 According to H.R. 2715, the following functional purpose children's products are granted the exemptions:
  - a) Off-highway motorized vehicles;
  - b) Bicycles and related products (the lead limit for metal components described in June 20, 2009 "Notice of Stay of Enforcement Pertaining to Bicycles and Related Products" continue to be applied until December 31, 2011. After the date, these metal components must meet a 300 ppm total lead limit.);
  - c) Resale of used children's products (excluding children's jewelry or any children's product for which known to be violated the lead limit).
- \*5 According to Consumer Product Safety Commission, the aluminum alloy components on children's ride-on tractors, children's ride-on cars, and other ride-on toys for children ages 3 years and older are granted to have a 300 ppm lead limit.



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# 5. ASTM F963- 11 Sect. 4.3.5.1 and 4.3.5.2 : Soluble heavy metal

#### Test result:

ASTM F963-11 Sect. 4.3.5.1 and 4.3.5.2	Soluble heavy metals	PASS
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Test method:

For paint and similar surface-coating materials: ASTM F963-11 Section 8.3.2 Method to Dissolve Soluble Matter for Surface Coatings

For substrate: ASTM F963-11 Section 8.3.5 Soluble Element Test Method for Substrate Materials

This requirement applies to the coating and substrate materials which the sample weight is greater than 10 mg

Test result:

		Sb	As	Ba	Cd	Cr	Pb	Hg	Se	
	Maximum Permissible Limit of Any Toy Materials								Conclusion	
l			except Modelling Clay           60         25         1000         75         60         90         60         500							
Test No.	Material	60								
INO.	No.		Maxim	ium Perr	missible	Limit of	Modellin	g Clay		
		60	25	250	50	25	90	25	500	
					F	lL				
		2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
T001	M001	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	Pass
T002	M002	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	Pass
T003	M003	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	Pass
T004	M004	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	Pass
T005	M005	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	Pass
T006	M006	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	Pass
T007	M007* <sup>1</sup>	n.d.	n.d.	15	n.d.	n.d.	n.d.	n.d.	n.d.	Pass
T008	M008	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	Pass
T009	M009	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	Pass
T010	M010	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	Pass
T011	M011	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	Pass
T012	M012	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	Pass
T013	M013	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	Pass
T014	M014	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	Pass
T015	M015	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	Pass
T016	M016	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	Pass
T017	M018	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	Pass
T018	M019* <sup>1</sup>	n.d.	n.d.	11	n.d.	n.d.	n.d.	n.d.	n.d.	Pass
T019	M020	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	Pass
T020	M021	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	Pass
T021	M022	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	Pass
T022	M023	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	Pass
T023	M024	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	Pass
T024	M025	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	Pass
T025	M026	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	Pass
T026	M027	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	Pass



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| T027 | M028 | n.d. | Pass |
|------|------|------|------|------|------|------|------|------|------|------|
| T028 | M029 | n.d. | Pass |
| T029 | M030 | n.d. | Pass |

Abbreviation: n.d. = Not Detected (< RL)

RL = Reporting Limit

mg/kg = milligram per kilogram

Remark \*1 The material is deemed comply with the requirement of ASTM F963 cl. 8.3.4.3 after analytical correction.

# Analytical Correction

Element	Sb	As	Ва	Cd	Cr	Pb	Hg	Se
Analytical Correction ( in %)	60	60	30	30	30	30	50	60

\*2 As the item 17 was less than 10mg, the item was not tested. According to prEN71-3.



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# Sample Photos:





