

HAPE INTERNATIONAL (NINGBO) LTD  
 HAPPY ARTS&CRAFTS(NINGBO)CO., LTD  
 9-27NANHAI ROAD, DAGANG INDUSTRIAL CITY, BEILUN, NINGBO, CHINA

Sample Description : SOLAR SYSTEM PUZZLE  
 2-IN-1 WORLD TOUR PUZZLE AND GAME

Sample Quantity : 10 SETS

Style / Item No. : E1625/E1626

Country of Origin : CHINA

Country of Destination : GLOBAL

Client Reference Information : E1625A/E1626A

Labeled Age Grading : 5Y+

Requested Age Grading : 5Y+  
 \*\*\*\*\*

Age Group Assessed as Per Age Guideline : 5+YEARS

Age Group Applied in Testing : 5+YEARS

Sample Receiving Date : APR. 15, 2020

Resubmitted Packaging Date : APR. 30, 2020

Testing Period : APR. 15, 2020 TO MAY 09, 2020

<u>Test Requested</u>	<u>Result</u>
EN 71-1: 2014+A1: 2018 – Safety of toys – Part 1: Mechanical and Physical Properties	<u>Pass</u>
Labeling requirement (Washing/Cleaning Label, CE mark, importer / manufacturer mark (name, address), product identification) according to Informative Annex A.26 and A.33 of the European standard on Safety of toys EN 71-1:2014+A1:2018 and the Directive 2009/48/EC-Safety of toys	<u>Pass</u>
EN 71-2: 2011+A1: 2014 – Safety of toys – Part 2: Flammability	<u>Pass</u>
EN71-3: 2019 as harmonized standard under Directive 2009/48/EC and its amendment (EU) 2019/1728 – Migration of certain elements (Category III:for scrapped-off toy material)	<u>Pass</u>
EN71-3: 2019 as harmonized standard under Directive 2009/48/EC and its amendment (EU) 2019/1922 – Migration of certain elements (Category III:for scrapped-off toy material)	<u>Pass</u>

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



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Signed for and on behalf of  
SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.



scan to see the report



SHHL2004511819TY

Wallace Lui  
Senior Technical Manager, Asia



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Results:

**EN 71-1: 2014+A1:2018 – SAFETY OF TOYS – PART 1: MECHANICAL AND PHYSICAL PROPERTIES**

AS SPECIFIED IN EN 71-1: 2014+A1:2018 – SAFETY OF TOYS – PART 1: MECHANICAL AND PHYSICAL PROPERTIES

Clauses relevant to the item:

<u>Clause</u>	<u>Description</u>	<u>Result</u>
4	General requirements	
4.1	Material cleanliness	<u>Pass</u>
4.7	Edges	<u>Pass</u>
4.8	Points and metallic wires	<u>Pass</u>
6	Packaging	<u>Pass #</u>
7	Warnings, markings and instructions for use	
7.1	General Requirements	<u>Pass</u>
	Note: Please note that for assessing the visibility and legibility of warnings, CEN has introduced good practice in the informative Annex A.33 by addressing the following aspects:	
	a) Emphasising the warning	
	b) Contrast, background and colours	
	c) Reflecting surfaces and obscuring material	
	d) Font type	
	e) Font size	
	f) Logical direction of text	
	For more details, see EN 71-1.	
7.2	Toys not intended for children under 36 months (Remark: The toy contains small part. It is acceptable because appropriate warning is found on packaging.)	<u>Pass</u> <u>See Remark</u>

The item with # means it has been retested.

Only English warnings were checked for the clause 7. According to 2009/48/EC, warnings and safety instructions shall be written in a language or languages easily understood by consumers.

**LABELING REQUIREMENT (WASHING/CLEANING INSTRUCTION, CE MARK, IMPORTER / MANUFACTURER NAME AND ADDRESS, PRODUCT IDENTIFICATION) ACCORDING TO INFORMATIVE ANNEX A.26 AND A.33 OF THE EUROPEAN STANDARD ON SAFETY OF TOYS EN 71-1:2014+A1:2018 AND THE DIRECTIVE 2009/48/EC – SAFETY OF TOYS**

Summary table:

	Observation Result	Location
Washing/Cleaning instruction	Not applicable	/
CE Mark	Present	Toy/Packaging
Importer's Name & Address	Present	Toy/Packaging
Manufacturer's Name & Address	Present	Toy/Packaging



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Product ID	Present	Toy/Packaging
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Note:

1. 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. A textile toy must, to this end, be washable, except if it contains a mechanism that may be damaged if soak washed. The manufacturer should, if applicable, provide instructions on how the toy has to be cleaned. According to the GUIDANCE DOCUMENT ON THE APPLICATION OF DIRECTIVE 2009/48/EC ON THE SAFETY OF TOYS, manufacturer shall not label "surface washing" on textile toys which, under the TSD, need to be soak washable.
2. CE marking should be visible from outside the packaging and its height must be at least 5mm.
3. Manufacturer's and Importer's name, registered trade name or registered trade mark and the address at which the manufacturer can be contacted must be indicated on the toy or, where that is not possible, on its packaging or in a document accompanying the toy.
4. Manufacturers must 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.

**EN 71-2: 2011+A1: 2014 – SAFETY OF TOYS – PART 2: FLAMMABILITY**

AS SPECIFIED IN EN 71-2:2011+A1:2014 – SAFETY OF TOYS – PART 2: FLAMMABILITY

Clauses relevant to the item:

Clause	Description	Result
4.1	General requirements	Pass

N.B. : - Only applicable clauses were shown.

Test Part Description :

Specimen No.	SGS Sample ID	Description
SN1	SHA20-060287.001	CMYK coating
SN2	SHA20-060287.002	Red coating
SN3	SHA20-060287.003	Orange coating
SN4	SHA20-060287.004	Blue coating
SN5	SHA20-060287.005	Brown coating
SN6	SHA20-060287.006	Beige coating
SN7	SHA20-060287.007	Aqua coating
SN8	SHA20-060287.008	Lt. aqua coating
SN9	SHA20-060287.009	Purple coating
SN10	SHA20-060287.010	Yellow ABS
SN11	SHA20-060287.011	Solid wood
SN12	SHA20-060287.012	Paper without coating(puzzle)

Remarks :

- (1) 1 mg/kg = 0.0001%
- (2) MDL = Method Detection Limit
- (3) ND = Not Detected ( < MDL )
- (4) "-" = Not Regulated



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**EN71-3: 2019 as harmonized standard under Directive 2009/48/EC and its amendment (EU) 2019/1728 – Migration of certain elements (Category III:for scrapped-off toy material)**

Test Method : With reference to EN 71-3:2019, analysis was performed by ICP-OES, IC-UV or LC-ICP-MS.

Test Item(s)	Limit	Unit	MDL	001	002	003
Soluble Chromium (VI) (Cr VI)	0.053	mg/kg	0.025	ND	ND	-
Soluble Lead (Pb)	23	mg/kg	5	ND	ND	---
Soluble Antimony (Sb)	560	mg/kg	10	ND	ND	---
Soluble Arsenic (As)	47	mg/kg	10	ND	ND	---
Soluble Barium (Ba)	18750	mg/kg	50	ND	ND	---
Soluble Cadmium (Cd)	17	mg/kg	5	ND	ND	---
Soluble Chromium (III) (Cr III)	460	mg/kg	5	ND	ND	-
Soluble Mercury (Hg)	94	mg/kg	10	ND	ND	---
Soluble Selenium (Se)	460	mg/kg	10	ND	ND	---
Soluble Boron (B)	15000	mg/kg	50	ND	ND	---
Soluble Cobalt (Co)	130	mg/kg	10	ND	ND	---
Soluble Manganese (Mn)	15000	mg/kg	50	ND	ND	---
Soluble Strontium (Sr)	56000	mg/kg	50	ND	ND	---
Soluble Zinc (Zn)	46000	mg/kg	50	ND	ND	---
Soluble Copper (Cu)	7700	mg/kg	50	ND	ND	---
Soluble Aluminum (Al)	70000	mg/kg	50	122	ND	---
Soluble Nickel (Ni)	930	mg/kg	10	ND	ND	---
Soluble Tin (Sn)	180000	mg/kg	3	ND	ND	---
Soluble Organic Tin*	12	mg/kg	-	ND	ND	---

Test Item(s)	Limit	Unit	MDL	004	005	006
Soluble Chromium (VI) (Cr VI)	0.053	mg/kg	0.025	ND	-	ND
Soluble Lead (Pb)	23	mg/kg	5	ND	---	ND
Soluble Antimony (Sb)	560	mg/kg	10	ND	---	ND
Soluble Arsenic (As)	47	mg/kg	10	ND	---	ND
Soluble Barium (Ba)	18750	mg/kg	50	ND	---	ND
Soluble Cadmium (Cd)	17	mg/kg	5	ND	---	ND
Soluble Chromium (III) (Cr III)	460	mg/kg	5	ND	-	ND
Soluble Mercury (Hg)	94	mg/kg	10	ND	---	ND
Soluble Selenium (Se)	460	mg/kg	10	ND	---	ND
Soluble Boron (B)	15000	mg/kg	50	ND	---	ND
Soluble Cobalt (Co)	130	mg/kg	10	ND	---	ND
Soluble Manganese (Mn)	15000	mg/kg	50	ND	---	ND
Soluble Strontium (Sr)	56000	mg/kg	50	ND	---	ND
Soluble Zinc (Zn)	46000	mg/kg	50	ND	---	ND
Soluble Copper (Cu)	7700	mg/kg	50	ND	---	ND
Soluble Aluminum (Al)	70000	mg/kg	50	73	---	265
Soluble Nickel (Ni)	930	mg/kg	10	ND	---	ND
Soluble Tin (Sn)	180000	mg/kg	3	ND	---	ND
Soluble Organic Tin*	12	mg/kg	-	ND	---	ND



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Test Item(s)	Limit	Unit	MDL	007	008	009
Soluble Chromium (VI) (Cr VI)	0.053	mg/kg	0.025	ND	ND	ND
Soluble Lead (Pb)	23	mg/kg	5	ND	ND	ND
Soluble Antimony (Sb)	560	mg/kg	10	ND	ND	ND
Soluble Arsenic (As)	47	mg/kg	10	ND	ND	ND
Soluble Barium (Ba)	18750	mg/kg	50	ND	ND	ND
Soluble Cadmium (Cd)	17	mg/kg	5	ND	ND	ND
Soluble Chromium (III) (Cr III)	460	mg/kg	5	ND	ND	ND
Soluble Mercury (Hg)	94	mg/kg	10	ND	ND	ND

Test Item(s)	Limit	Unit	MDL	007	008	009
Soluble Selenium (Se)	460	mg/kg	10	ND	ND	ND
Soluble Boron (B)	15000	mg/kg	50	ND	ND	ND
Soluble Cobalt (Co)	130	mg/kg	10	ND	ND	ND
Soluble Manganese (Mn)	15000	mg/kg	50	ND	ND	ND
Soluble Strontium (Sr)	56000	mg/kg	50	ND	ND	ND
Soluble Zinc (Zn)	46000	mg/kg	50	ND	ND	ND
Soluble Copper (Cu)	7700	mg/kg	50	ND	ND	ND
Soluble Aluminum (Al)	70000	mg/kg	50	160	250	92
Soluble Nickel (Ni)	930	mg/kg	10	ND	ND	ND
Soluble Tin (Sn)	180000	mg/kg	3	ND	ND	ND
Soluble Organic Tin*	12	mg/kg	-	ND	ND	ND

Test Item(s)	Limit	Unit	MDL	010	011	012
Soluble Chromium (VI) (Cr VI)	0.053	mg/kg	0.025	ND	ND	ND
Soluble Lead (Pb)	23	mg/kg	5	ND	ND	ND
Soluble Antimony (Sb)	560	mg/kg	10	ND	ND	ND
Soluble Arsenic (As)	47	mg/kg	10	ND	ND	ND
Soluble Barium (Ba)	18750	mg/kg	50	ND	ND	ND
Soluble Cadmium (Cd)	17	mg/kg	5	ND	ND	ND
Soluble Chromium (III) (Cr III)	460	mg/kg	5	ND	ND	ND
Soluble Mercury (Hg)	94	mg/kg	10	ND	ND	ND
Soluble Selenium (Se)	460	mg/kg	10	ND	ND	ND
Soluble Boron (B)	15000	mg/kg	50	ND	ND	ND
Soluble Cobalt (Co)	130	mg/kg	10	ND	ND	ND
Soluble Manganese (Mn)	15000	mg/kg	50	ND	83	ND
Soluble Strontium (Sr)	56000	mg/kg	50	ND	ND	75
Soluble Zinc (Zn)	46000	mg/kg	50	ND	ND	ND
Soluble Copper (Cu)	7700	mg/kg	50	ND	ND	ND
Soluble Aluminum (Al)	70000	mg/kg	50	ND	ND	528
Soluble Nickel (Ni)	930	mg/kg	10	ND	ND	ND
Soluble Tin (Sn)	180000	mg/kg	3	ND	ND	ND
Soluble Organic Tin*	12	mg/kg	-	ND	ND	ND

Notes :

- (1) Mass of trace amount of sample 001 is 44.0 mg, sample 002 is 38.7 mg, sample 004 is 39.5 mg, sample 006 is 54.2 mg, sample 007 is 59.8 mg, sample 008 is 62.8 mg, sample 009 is 41.7 mg.
- (2) As received, the test portion of 003, 005 are less than 10mg, therefore such components were not tested for migration of certain elements, as specified in the European Standard EN 71-3:2019.
- (3) \*Confirmation test of soluble organic tin is not required in case of soluble tin, after conversion, does not



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exceed the soluble organic tin requirement as specified in EN 71-3:2019.

**EN71-3: 2019 as harmonized standard under Directive 2009/48/EC and its amendment (EU) 2019/1922 – Migration of certain elements (Category III:for scrapped-off toy material)**

Test Method : With reference to EN 71-3:2019, analysis was performed by ICP-OES, IC-UV or LC-ICP-MS.

Test Item(s)	Limit	Unit	MDL	001	002	003
Soluble Chromium (VI) (Cr VI)	0.053	mg/kg	0.025	ND	ND	-
Soluble Lead (Pb)	23	mg/kg	5	ND	ND	---
Soluble Antimony (Sb)	560	mg/kg	10	ND	ND	---
Soluble Arsenic (As)	47	mg/kg	10	ND	ND	---
Soluble Barium (Ba)	18750	mg/kg	50	ND	ND	---
Soluble Cadmium (Cd)	17	mg/kg	5	ND	ND	---
Soluble Chromium (III) (Cr III)	460	mg/kg	5	ND	ND	-
Soluble Mercury (Hg)	94	mg/kg	10	ND	ND	---
Soluble Selenium (Se)	460	mg/kg	10	ND	ND	---
Soluble Boron (B)	15000	mg/kg	50	ND	ND	---
Soluble Cobalt (Co)	130	mg/kg	10	ND	ND	---
Soluble Manganese (Mn)	15000	mg/kg	50	ND	ND	---
Soluble Strontium (Sr)	56000	mg/kg	50	ND	ND	---
Soluble Zinc (Zn)	46000	mg/kg	50	ND	ND	---
Soluble Copper (Cu)	7700	mg/kg	50	ND	ND	---
Soluble Aluminum (Al)	28130	mg/kg	50	130	ND	---
Soluble Nickel (Ni)	930	mg/kg	10	ND	ND	---
Soluble Tin (Sn)	180000	mg/kg	3	ND	ND	---
Soluble Organic Tin*	12	mg/kg	-	ND	ND	---

Test Item(s)	Limit	Unit	MDL	004	005	006
Soluble Chromium (VI) (Cr VI)	0.053	mg/kg	0.025	ND	-	ND
Soluble Lead (Pb)	23	mg/kg	5	ND	---	ND
Soluble Antimony (Sb)	560	mg/kg	10	ND	---	ND
Soluble Arsenic (As)	47	mg/kg	10	ND	---	ND
Soluble Barium (Ba)	18750	mg/kg	50	ND	---	ND
Soluble Cadmium (Cd)	17	mg/kg	5	ND	---	ND
Soluble Chromium (III) (Cr III)	460	mg/kg	5	ND	-	ND
Soluble Mercury (Hg)	94	mg/kg	10	ND	---	ND
Soluble Selenium (Se)	460	mg/kg	10	ND	---	ND
Soluble Boron (B)	15000	mg/kg	50	ND	---	ND
Soluble Cobalt (Co)	130	mg/kg	10	ND	---	ND
Soluble Manganese (Mn)	15000	mg/kg	50	ND	---	ND



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Test Item(s)	Limit	Unit	MDL	004	005	006
Soluble Strontium (Sr)	56000	mg/kg	50	ND	---	ND
Soluble Zinc (Zn)	46000	mg/kg	50	ND	---	ND
Soluble Copper (Cu)	7700	mg/kg	50	ND	---	ND
Soluble Aluminum (Al)	28130	mg/kg	50	73	---	265
Soluble Nickel (Ni)	930	mg/kg	10	ND	---	ND
Soluble Tin (Sn)	180000	mg/kg	3	ND	---	ND
Soluble Organic Tin*	12	mg/kg	-	ND	---	ND

Test Item(s)	Limit	Unit	MDL	007	008	009
Soluble Chromium (VI) (Cr VI)	0.053	mg/kg	0.025	ND	ND	ND
Soluble Lead (Pb)	23	mg/kg	5	ND	ND	ND
Soluble Antimony (Sb)	560	mg/kg	10	ND	ND	ND
Soluble Arsenic (As)	47	mg/kg	10	ND	ND	ND
Soluble Barium (Ba)	18750	mg/kg	50	ND	ND	ND
Soluble Cadmium (Cd)	17	mg/kg	5	ND	ND	ND
Soluble Chromium (III) (Cr III)	460	mg/kg	5	ND	ND	ND
Soluble Mercury (Hg)	94	mg/kg	10	ND	ND	ND
Soluble Selenium (Se)	460	mg/kg	10	ND	ND	ND
Soluble Boron (B)	15000	mg/kg	50	ND	ND	ND
Soluble Cobalt (Co)	130	mg/kg	10	ND	ND	ND
Soluble Manganese (Mn)	15000	mg/kg	50	ND	ND	ND
Soluble Strontium (Sr)	56000	mg/kg	50	ND	ND	ND
Soluble Zinc (Zn)	46000	mg/kg	50	ND	ND	ND
Soluble Copper (Cu)	7700	mg/kg	50	ND	ND	ND
Soluble Aluminum (Al)	28130	mg/kg	50	160	250	92
Soluble Nickel (Ni)	930	mg/kg	10	ND	ND	ND
Soluble Tin (Sn)	180000	mg/kg	3	ND	ND	ND
Soluble Organic Tin*	12	mg/kg	-	ND	ND	ND

Test Item(s)	Limit	Unit	MDL	010	011	012
Soluble Chromium (VI) (Cr VI)	0.053	mg/kg	0.025	ND	ND	ND
Soluble Lead (Pb)	23	mg/kg	5	ND	ND	ND
Soluble Antimony (Sb)	560	mg/kg	10	ND	ND	ND
Soluble Arsenic (As)	47	mg/kg	10	ND	ND	ND
Soluble Barium (Ba)	18750	mg/kg	50	ND	ND	ND
Soluble Cadmium (Cd)	17	mg/kg	5	ND	ND	ND
Soluble Chromium (III) (Cr III)	460	mg/kg	5	ND	ND	ND
Soluble Mercury (Hg)	94	mg/kg	10	ND	ND	ND
Soluble Selenium (Se)	460	mg/kg	10	ND	ND	ND
Soluble Boron (B)	15000	mg/kg	50	ND	ND	ND
Soluble Cobalt (Co)	130	mg/kg	10	ND	ND	ND
Soluble Manganese (Mn)	15000	mg/kg	50	ND	83	ND
Soluble Strontium (Sr)	56000	mg/kg	50	ND	ND	75
Soluble Zinc (Zn)	46000	mg/kg	50	ND	ND	ND
Soluble Copper (Cu)	7700	mg/kg	50	ND	ND	ND
Soluble Aluminum (Al)	28130	mg/kg	50	ND	ND	528
Soluble Nickel (Ni)	930	mg/kg	10	ND	ND	ND
Soluble Tin (Sn)	180000	mg/kg	3	ND	ND	ND
Soluble Organic Tin*	12	mg/kg	-	ND	ND	ND



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Notes :

- (1) Mass of trace amount of sample 001 is 44.0 mg, sample 002 is 38.7 mg, sample 004 is 39.5 mg, sample 006 is 54.2 mg, sample 007 is 59.8 mg, sample 008 is 62.8 mg, sample 009 is 41.7 mg.
- (2) As received, the test portion of 003, 005 are less than 10mg, therefore such components were not tested for migration of certain elements, as specified in the European Standard EN 71-3:2019.
- (3) \*Confirmation test of soluble organic tin is not required in case of soluble tin, after conversion, does not exceed the soluble organic tin requirement as specified in EN 71-3:2019.

Remark:

The test results 002 are taken from report SHA20-027733.006  
 The test results 003 are taken from report SHA20-027733.015  
 The test results 005 are taken from report SHA20-027733.010  
 The test results 011 are taken from report SHA20-012737.015

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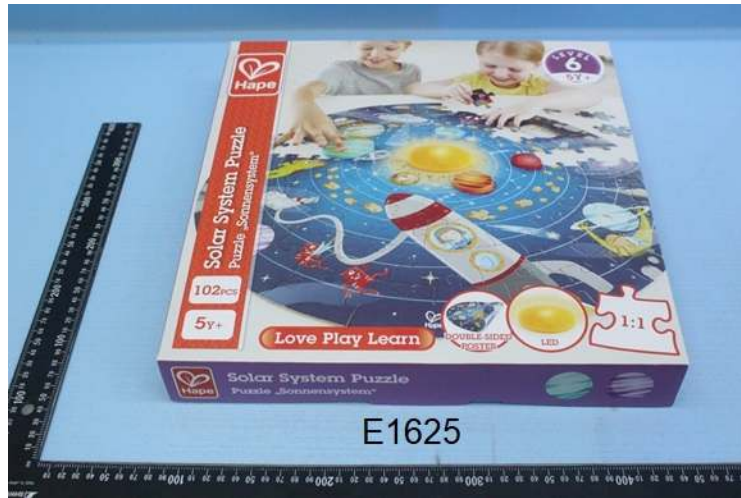


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