Test Report

Report No.: NB2025068321-R3 **Date:** July 17, 2025

Applicant: Nobility Inc

Address: 251 Little Falls Drive, Wilmington, Delaware, United States, 19808

The following merchandise were submitted and identified by the clients as:

Sample Name:	SainSmart Jr. 3D Puzzle
Model No.:	808-100-PZ01,808-100-PZ02,808-100-PZ03
Country of Destination:	USA
Manufacturer:	Dongguan Nobility Industrial Development Co., Ltd.
Manufacturer address:	Room 201, Building 19, No.1, Dongke Road, DongCheng Street, Dongguan city, Guangdong Province, China.
Laboratory suggestions for testing:	12 years+
Testing Age Grading:	For ages over 12 years

The following information were confirmed by the laboratory:

Sample Receiving Date:	June 16, 2025
Testing Period:	From June 16, 2025 to June 20, 2025
Test Results:	Please refer to next pages

Test Requested

Please refer to the next page

Signed for and on behalf of Guangdong NewBest Testing Service Co., Ltd.

Approved by:

Manager

Summary of test results

Test Requested		Conclusion
1	Mechanical and Physical Properties Requirements -ASTM F963-23, Standard Consumer Safety Specification for Toy Safety	PASS
2	Flammability of Solids Requirement -ASTM F963-23,A5, Standard Consumer Safety Specification for Toy Safety	PASS
3	16 CFR Part 1500.44, Method for determining extremely flammable and flammable soilds	PASS
4	Total Lead Content in Surface Coating - ASTM F963-23, Section 4.3.5.1(1)	PASS
5	Total Lead Content in Substrate - ASTM F963-23, Section 4.3.5.2(2)(a)	PASS
6	Soluble Heavy Metals Content in Surface Coating - ASTM F963-23, Section 4.3.5.1(2)	PASS
7	Soluble Heavy Metals Content in Substrate - ASTM F963-23, Section 4.3.5.2(2)(b)	PASS
8	Phthalate Content – ASTM F963-23	PASS
9	Total Lead Content in Surface Coating - United States Code of Federal Regulations (CFR), Title 16, Part 1303	PASS
10	Total Lead Content in Surface Coating - United States Consumer Product Safety Improvement Act (CPSIA) of 2008, Section 101(f)	PASS
11	Total Lead Content in Substrate - United States Consumer Product Safety Improvement Act (CPSIA) Section 101(a)(2)	PASS
12	Phthalates Content in Children's Toys and Childcare Articles – Consumer Product Safety Improvement Act (CPSIA) of 2008, Section 108 / 16 CFR part 1307	PASS
13	Total Cadmium Content - Washington Children's Safe Products Act (CSPA) - RCW 70A.430.020	PASS
14	Sharp Point , Sharp Edge and Small Parts test- U.S. CFR Title 16 (CPSC Regulations) Part 1500.48,1500.49&1501	N/A
15	CPSIA Tracking Labels for Children's Products	N/A*

Note: Tested part(s) was/were specified by client.
N/A*=:At the request of the client,the sample was evaluated for use by children over 12 years, Therefore the sample was not applicable to the Consumer Product Safety Improvement Act(CPSIA) of 2008 section 103 tracking labels for children's products

Test results:

Tested part(s) description:

Test Item(s)	Description	Location
I001	Transparent plastic	Bottle
I002	Multicolor coating	Surface
I003	Natural plywood	Body
I004	Light brown fiberboard	Body
I005	White plastic	Lid
I006	Translucent white plastic	Inner lid
I007	SainSmart Jr. 3D Puzzle	--

1. Mechanical and Physical Properties Requirements -ASTM F963-23, Standard Consumer Safety Specification for Toy Safety

Section	Requirement	Result
4	Safety requirements	
4.1	Material Quality	M
4.3	Toxicology	N/A
4.3.5	Heavy Elements	M
4.3.5.1	Paint and Similar Surface-Coating Materials	M
4.3.5.2	Toy Substrate Materials	M
4.3.6	Cosmetics, Liquids, Pastes, Putties, Gels, Powders, and Items of Avian Feather Origin	N/A
4.3.7	Stuffing Materials	N/A
4.5	Sound-Producing Toys	N/A
4.6	Small Objects	
4.6.1	For children under 36 months	N/A
4.6.2	Mouth-actuated Toys	N/A
4.6.3	For children 36 months and over but under 72 months	N/A
4.7	Accessible Edges	N/A
4.8	Projections	N/A
4.9	Accessible Points	N/A
4.10	Wires and Rods	N/A
4.11	Nails and Fasteners	N/A
4.12	Plastic Film	N/A

Section	Requirement	Result
4.13	Folding Mechanisms and Hinges	N/A
4.14	Cords,Straps and Elastics	N/A
4.15	Stability and Over-Load Requirements	N/A
4.16	Confined Spaces	N/A
4.17	Wheels,Tires,an Axles	N/A
4.18	Holes,Clearances and Accessibility of Mechanisms	N/A
4.19	Simulated Protective Devices	N/A
4.20	Pacifiers	N/A
4.21	Projectile Toys	N/A
4.22	Teethers and Teething Toys	N/A
4.23	Rattles	N/A
4.24	Squeeze Toys	N/A
4.25	Battery-Operated Toys	N/A
4.26	Toys Intended to be Attached to a Crib or Playpen	N/A
4.27	Stuffed and Beanbag-Type Toys	N/A
4.28	Stroller and carriage toys	N/A
4.30	Toy Gun Marking	N/A
4.31	Balloons	N/A
4.32	Certain Toys with Nearly Spherical Ends	N/A
4.33	Marbles	N/A
4.34	Small Balls	N/A
4.35	Pompoms	N/A
4.36	Hemispheric-Shaped Objects	N/A
4.37	Yo Yo Elastic Tether Toys	N/A
4.38	Magnets	N/A
4.39	Jaw Entrapment in Handles and Steering Wheels	N/A
4.40	Expanding Materials	N/A
4.41	Toy chests	N/A
5	Labeling Requirements	M
5.1	Tracking label	M
5.4&5.3	Aquatic Toys	N/A
5.5&5.3	Crib and Playpen Toys	N/A
5.6&5.3	Mobiles	N/A

Section	Requirement	Result
5.7&5.3	Stroller and Carriage Toys	N/A
5.8&5.3	Toys Intended to be Assembled by an Adult	N/A
5.9&5.3	Simulated Protective Devices	N/A
5.10&5.3	Toys with Functional Sharp Edges or Points	N/A
5.11	Small Objects, Small Balls, Marbles, and Balloons	N/A
5.12	Art Materials	N/A
5.13	Electric Toys	N/A
5.14	Battery-operated Toys	N/A
5.14&5.3	Battery operated toys (Toys with non-replaceable batteries)	N/A
5.15	Promotional Materials	M
5.16&5.3	Magnets	N/A
6	Instructional Literature	M
6.1	Definition and Description	M
6.2	Crib and Playpen Toys	N/A
6.3	Mobiles	N/A
6.4&5.3	Toys Intended to be Assembled by and Adult	N/A
6.5	Battery operated toys	N/A
6.6	Battery powered ride-on toys	N/A
6.7	Toys in Contact with Food	N/A
6.8	Toy Chests	N/A
6.9	Electric toy matching tools	N/A
7	Producer's Markings	M
7.1	Name of the producer or the distributor	M
	Address of the producer or the distributor	M
7.2	Battery powered ride on toys	N/A
7.3	Toy chests	N/A
8	Test Methods	--
8.5	Normal Use Testing	M
8.5.1	Washable Toys	N/A
8.6	Abuse Testing	N/A
8.7	Impact Tests	N/A
8.7.1	Drop Test	N/A
8.7.2	Tip-over Test for Large, Bulky Toys	N/A

Section	Requirement	Result
8.7.3	Tumble Test for Wheeled Toys	N/A
8.7.4	Impact Test for Toys that Cover the Face	N/A
8.8	Torque Tests for Removal of Components	N/A
8.9	Tension Test for Removal of Components	N/A
8.10	Compression Test	N/A
8.11	Tests for Tire Removal and Snap-in Wheel and Axle Assembly Removal	N/A
8.12	Flexure Test	N/A
8.13	Test Methods for Mouth-actuated Toys and Mouth-actuated Projectile Toys	N/A
8.14	Projectiles	N/A
8.15	Test for Stability of Ride-on Toys or Toy Seats	N/A
8.16	Tension test for pompoms	N/A
8.17	Stalled Motor Test for Battery-operated Toys	N/A
8.18	Tests for Battery-powered Ride-on Toys	N/A
8.19	Test for Toys that Contain Secondary Cells or Batteries	N/A
8.20	Tests for Toys Which Produce Sound	N/A
8.21	Dynamic Strength Test for Wheeled Ride-on Toys	N/A
8.22	Plastic Film Thickness	N/A
8.23	Test for Loops and Cords	N/A
8.24	Yo Yo Elastic Tether Toy Test Methods	N/A
8.25	Flux Density Measurement	N/A
8.26	Test Methods for Locking Mechanisms or Other Means	N/A
8.27	Tests for Toy Chest Lids and Closures	N/A
8.28	Test for Overload of Ride-On Toys and Toy Seats	N/A
8.29	Stuffing Materials Evaluation	N/A
8.30	Expanding Materials–Test Method	N/A

Note: M = Meet NM = Not meet N/A = Not Applicable NR = Not Requested by the client

At request of the client, the Clause 4.3.6 was not evaluated at this submission.

2. Flammability of Solids Requirement -ASTM F963-23,A5, Standard Consumer Safety Specification for Toy Safety

Test Method: Federal Hazardous Substances Act (FHSA) 16 CFR 1500.44

Test Item	Result	Requirement	Conclusion
I007	IBE	Burn rate should not be greater than 0.1 in/sec.	PASS

Note:
1. DNI = Did not ignite.
2. IBE = Ignited but self-extinguished before burn-rate could be determined.
3. In accordance with the FHSA 16 CFR 1500.3 (C) (6) (vi), the burning rate should not be greater than 0.1 in/sec.
4. The burn rate of all samples is greater than 0.1 in. /s (2.5 mm/s) but less than 0.15 in. /s (3.75 mm/s), accept and consider further investigation for action to improve performance.
5. All styles of the submitted toy samples (and its accessories) was/were tested, the above result only showed the most severe burn rate of the samples.

3. 16 CFR Part 1500.44, Method for determining extremely flammable and flammable soilds

Requirement	Test Method Reference	Findings
Burn rate no greater than 0.1 of an inch per second	16 CFR 1500.44	Ignited but self-extinguished

4. Total Lead Content in Surface Coating - ASTM F963-23, Section 4.3.5.1(1)

Test Method: ASTM F963-23 Section 8.3.1,Analyzed by Inductively Coupled Plasma Optical Emission Spectrometry or Atomic Absorption Spectrometry.

Limit	90 mg/kg	
Test Item(s)	**Result (mg/kg)**	**Conclusion**
I002	29	PASS

Note: N.D.= Not Detected(<MDL)
mg/kg = milligram per kilogram = ppm = part per million
MDL= Detection Limit (mg/kg): 10
Results shown are of the total weight of mixed samples.

5. Total Lead Content in Substrate - ASTM F963-23, Section 4.3.5.2(2)(a)

Test Method: ASTM F963-23 Section 8.3.1, Analyzed by Inductively Coupled Plasma Optical Emission Spectrometry or Atomic Absorption Spectrometry.

Limit	100 mg/kg	
Test Item(s)	**Result (mg/kg)**	**Conclusion**
I003+I004	N.D.	PASS

Note: N.D.= Not Detected(<MDL)
mg/kg = milligram per kilogram = ppm = part per million
MDL= Detection Limit (mg/kg): 10
Results shown are of the total weight of mixed samples.

6. Soluble Heavy Metals Content in Surface Coating - ASTM F963-23, Section 4.3.5.1(2)

Test Method: ASTM F963-23, Sections 8.3.2 to 8.3.4, Analyzed by Inductively Coupled Plasma Optical Emission Spectrometry.

Analyte	Result (mg/kg)	Limit (mg/kg)
	Test Item(s)	
	I002	
Soluble Arsenic (As)	N.D.	25
Soluble Barium (Ba)	N.D.	1000
Soluble Cadmium (Cd)	N.D.	75
Soluble Chromium (Cr)	N.D.	60
Soluble Mercury (Hg)	N.D.	60
Soluble Lead (Pb)	N.D.	90
Soluble Antimony (Sb)	N.D.	60
Soluble Selenium (Se)	N.D.	500
Conclusion	PASS	--

Note: N.D.= Not Detected(<MDL)
mg/kg = milligram per kilogram = ppm = part per million
MDL= Detection Limit (mg/kg): 5

7. Soluble Heavy Metals Content in Substrate - ASTM F963-23, Section 4.3.5.2(2)(b)

Test Method: ASTM F963-23, Section 8.3.5 (Excluding 8.3.5.5(3)), Analyzed by Inductively Coupled Plasma Optical Emission Spectrometry.

Analyte	Result (mg/kg)		Limit (mg/kg)
	Test Item(s)		
	I003	I005	
Soluble Arsenic (As)	N.D.	N.D.	25
Soluble Barium (Ba)	N.D.	N.D.	1000
Soluble Cadmium (Cd)	N.D.	N.D.	75
Soluble Chromium (Cr)	N.D.	N.D.	60
Soluble Mercury (Hg)	N.D.	N.D.	60
Soluble Lead (Pb)	N.D.	N.D.	90
Soluble Antimony (Sb)	N.D.	N.D.	60
Soluble Selenium (Se)	N.D.	N.D.	500
Conclusion	PASS	PASS	--

Note: N.D.= Not Detected(<MDL)
mg/kg = milligram per kilogram = ppm = part per million
MDL= Detection Limit (mg/kg): 5

8. Phthalate Content – ASTM F963-23

Test Method: CPSC-CH-C1001-09.4, Analyzed by Gas Chromatography-Mass Spectrometer.

Analyte	Requirement (%, w/w)	Result (%, w/w)
		Test Item(s)
		I001+I005+I006
Di-(2-ethylhexyl) phthalate (DEHP)	0.1	N.D.
Dibutyl phthalate (DBP)	0.1	N.D.
Benzylbutyl phthalate (BBP)	0.1	N.D.
Di-iso-butyl phthalate (DINP)	0.1	N.D.
Di-iso-butyl phthalate (DIBP)	0.1	N.D.
Di-n-pentyl phthalate (DPENP/DnPP)	0.1	N.D.
Di-n-hexyl phthalate (DHEXP/DnHP)	0.1	N.D.
Dicyclohexyl phthalate (DCHP)	0.1	N.D.
Conclusion	--	PASS

Note: N.D. = Not detected(<MDL) MDL= Detection Limit: 0.005%
mg/kg = milligram per kilogram = ppm = part per million
10000 mg/kg = 1 %
Results shown are of the total weight of mixed samples.

9. Total Lead Content in Surface Coating - United States Code of Federal Regulations (CFR), Title 16, Part 1303

Test Method: CPSC-CH-E1003-09.1, Analyzed by Inductively Coupled Plasma Optical Emission Spectrometry or Atomic Absorption Spectrometry.

Limit	90 mg/kg	
Test Item(s)	**Result (mg/kg)**	**Conclusion**
I002	29	PASS

Note: N.D.= Not Detected(<MDL)
mg/kg = milligram per kilogram = ppm = part per million
MDL= Detection Limit (mg/kg): 10
Results shown are of the total weight of mixed samples.

10. Total Lead Content in Surface Coating - United States Consumer Product Safety Improvement Act (CPSIA) of 2008, Section 101(f)

Test Method: CPSC-CH-E1003-09.1, Analyzed by Inductively Coupled Plasma Optical Emission Spectrometry or Atomic Absorption Spectrometry.

Limit	90 mg/kg	
Test Item(s)	**Result (mg/kg)**	**Conclusion**
I002	29	PASS

Note: N.D.= Not Detected(<MDL)
mg/kg = milligram per kilogram = ppm = part per million
MDL= Detection Limit (mg/kg): 10
Results shown are of the total weight of mixed samples.

11. Total Lead Content in Substrate - United States Consumer Product Safety Improvement Act (CPSIA) Section 101(a)(2)

Test Method: CPSC-CH-E1002-08.3 , Analyzed by Inductively Coupled Plasma Optical Emission Spectrometry or Atomic Absorption Spectrometry.

Limit	100 mg/kg	
Test Item(s)	**Result (mg/kg)**	**Conclusion**
I003+I004	N.D.	PASS

Note: N.D.= Not Detected(<MDL)
mg/kg = milligram per kilogram = ppm = part per million
MDL= Detection Limit (mg/kg): 10
Results shown are of the total weight of mixed samples.

12. Phthalates Content in Children's Toys and Childcare Articles – Consumer Product Safety Improvement Act (CPSIA) of 2008, Section 108 / 16 CFR part 1307

Test Method: CPSC-CH-C1001-09.4, Analyzed by Gas Chromatography-Mass Spectrometer.

Analyte	Requirement (%, w/w)	Result (%, w/w)
		Test Item(s)
		I001+I005+I006
Di-(2-ethylhexyl) phthalate (DEHP)	0.1	N.D.
Dibutyl phthalate (DBP)	0.1	N.D.
Benzylbutyl phthalate (BBP)	0.1	N.D.
Di-iso-butyl phthalate (DINP)	0.1	N.D.
Di-iso-butyl phthalate (DIBP)	0.1	N.D.
Di-n-pentyl phthalate (DPENP/DnPP)	0.1	N.D.
Di-n-hexyl phthalate (DHEXP/DnHP)	0.1	N.D.
Dicyclohexyl phthalate (DCHP)	0.1	N.D.
Conclusion	--	PASS

Note: N.D. = Not detected(<MDL) MDL= Detection Limit: 0.005%
mg/kg = milligram per kilogram = ppm = part per million
10000 mg/kg = 1 %
Results shown are of the total weight of mixed samples.

13. Total Cadmium Content - Washington Children's Safe Products Act (CSPA) - RCW 70A.430.020#

Test Method: With reference to CPSC-CH-E1002-08.3 or CPSC-CH-E1003-09.1, Analyzed by Inductively Coupled Plasma Optical Emission Spectrometry or Atomic Absorption Spectrometry.

Limit	40 mg/kg	
Test Item(s)	**Result (mg/kg)**	**Conclusion**
I002	N.D.	PASS
I003+I004	N.D.	PASS

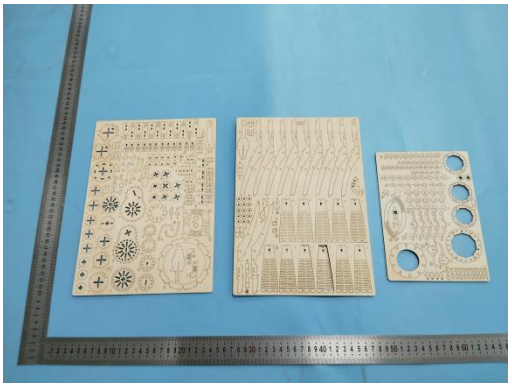
Note: N.D.= Not Detected(<MDL)
mg/kg = milligram per kilogram = ppm = part per million
MDL= Detection Limit (mg/kg): 10
Results shown are of the total weight of mixed samples.

Remark: Tested sample-photo 1

This report is to supersede NBTS report No. NB2025068321-R2 dated on July 14, 2025.
Update Physical cluase 4.3.6

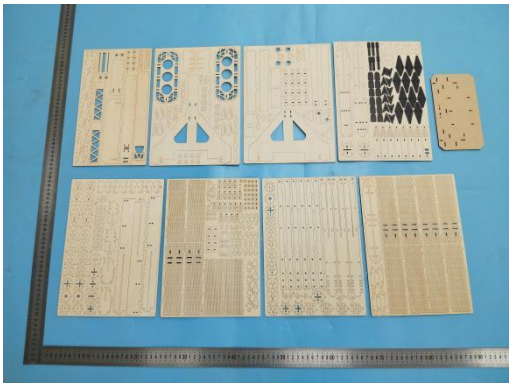
Disclaimer Measurement Uncertainty:
Unless otherwise agreed upon, Pass or Fail verdicts are given based on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither by assessed as PASS nor as FAIL.

Samples photograph

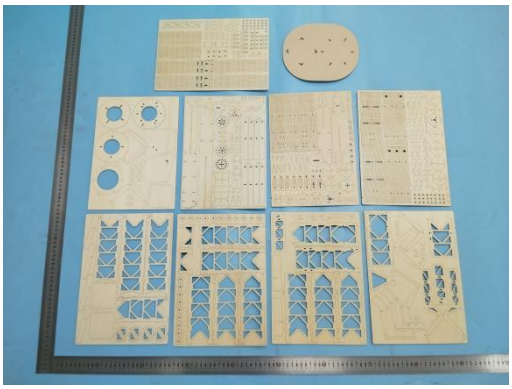


1

NB2025068321



NB2025068321



NB2025068321

NBTS authenticate the photograph on original report only

*** End of Report ***

Room 201, Room 401, Building 11, No.38 Dongke Road, Dongcheng Street, Dongguan City, Guangdong Province

GUANGDONG NEWBEST TESTING SERVICE Co. Ltd.

Tel: 400-877-6107 Website: www.nbtszg.com

Fax: 0769-22777508 E-mail: newbest@nbtscn.com