

TEST REPORT

The report shall not be reproduced without written approval from Intertek

The results relate only to the item tested.

Number: BKKH18009529

Applicant: PLAN CREATIONS CO., LTD.
8 MOO 8, TRANG-PALIAN RD.,
YANTAKAO, TRANG, THAILAND 92140
ATTN: K.NARONG, K.SUPAPORN

Date: Nov 20, 2018

Sample description:

Quantity of sample: One (1) set
Sample description: Wooden toy
Date sample received: July 20, 2018
Date information received: November 09, 2018

Client Information:

One (1) set of submitted sample said to be PERCUSSION-TAMBOURINE

Item Name: PERCUSSION-TAMBOURINE
Item Number: 6429



BKKH18009529

Test conducted:

As requested by the applicant, for details please refer to attached page(s)

To be continued

For and on behalf of :
Intertek Testing Services (Thailand) Ltd.,
Hardlines Laboratory

Ladtaka Wongwiboonporn

Ladtaka Wongwiboonporn
Laboratory Manager
Hardlines Department

TEST REPORT

The report shall not be reproduced without written approval from Intertek

The results relate only to the item tested.

Number: BKKH18009529

Conclusion:

<u>Tested samples</u>	<u>Standard</u>	<u>Result</u>
Submitted sample	U.S. ASTM F963-17 for Physical and mechanical tests	Pass
	U.S. ASTM F963-17 for clause 4.5 Sound producing toys	Pass
	U.S. ASTM F963-17 for Flammability test of materials other than textile materials	Pass
	U.S. ASTM F963-16 for Heavy elements Test	Pass
	<u>Standard - U.S. CFR title 16</u> (CPSC regulations) Part 1303 total Lead content	Pass
	<u>Standard</u> U.S. Consumer product safety improvement Act 2008(H.R. 4040) Title I, Section 101 For total lead content in surface coating	Pass
	U.S. Consumer product safety improvement Act 2008(H.R. 4040) Title I, Section 101 For total lead content in non-surface coating material (substrate)	Pass
	US 16 CFR Part 1307 for Prohibition of Children's Toys and Child Care Articles Containing Specified Phthalates	Pass
	Phthalate Content Requirement base on the California Proposition 65	Pass
	Illinois Lead Poisoning Prevention Act 410 ILCS 45 section 6 (public act 095-1019)	Pass

Remark: As requested by the applicant, the test was conducted only on components listed in this report.
Other components were not tested.

TEST REPORT

The report shall not be reproduced without written approval from Intertek

The results relate only to the item tested.

Number: BKKH18009529

Remark:

The chemical test results was not conducted on the below components of samples. Applicant claimed the components were tested on our previous test report.

<u>Components</u>	<u>Report No.</u>	<u>Date</u>
<u>ASTM F963-16: Heavy metal</u>		
BROWN COATING ON WOOD	BKKH18008771	Jul 12, 2018
BLUE SAWDUST	BKKH18001625	Feb 12, 2018
<u>Lead in surface coating</u>		
BROWN COATING ON WOOD	BKKH18008771	Jul 12, 2018
<u>Lead in substrate</u>		
BLUE SAWDUST	BKKH18001625	Feb 12, 2018
Metal Sheet	BKKH18013588	Oct 08, 2018
<u>Phthalate content</u>		
BROWN COATING ON WOOD	BKKH18008771	Jul 12, 2018
BLUE SAWDUST	BKKH18001625	Feb 12, 2018



TEST REPORT

The report shall not be reproduced without written approval from Intertek

The results relate only to the item tested.

Number: BKKH18009529

Test conducted:

1 Physical And Mechanical Tests▲

Test Standard : ASTM Standard Consumer Safety Specification for Toy Safety F963-16.

Age group for testing : For age over 18 months.

The submitted samples were undergone the use and abuse tests in accordance with the Federal Hazardous Substances Act (FHSA), Title 16, Code of Federal Regulations : -

Test	FHSA	Parameter
Drop test	Section 1500.52(b)	4 x 3.0 ft
Torque test	Section 1500.53(e)	4 in-lbf
Tension test	Section 1500.53(f)	15 lbf
Compression test	Section 1500.53(g)	30 lbf

Clause	Testing items	Assessment
4.1	Material quality	P
4.5	Sound-producing toys	P*1
4.6.1	Toys intended for children under 36 months (small objects)	P
4.6.2	Mouth-actuated toys	NA
4.6.3	Toys and games for 36 months to 72 months (small part warning)	NA
4.7	Accessible edges	P
4.8	Projections	NA
4.9	Accessible points	P
4.10	Wires or rods	NA
4.11	Nails and fasteners	NA
4.12	Plastic film	NA
4.13	Folding mechanisms and hinges	NA
4.14	Cords, straps and elastics	NA
4.15	Stability and over-load requirements	NA
4.16	Confined spaces	NA
4.17	Wheels, tires and axles	NA
4.18	Holes, clearance, and accessibility of mechanisms	NA
4.19	Simulated protective devices	NA
4.20	Pacifiers	NA
4.21	Projectile toys	NA
4.22	Teethers and teething toys	NA

TEST REPORT

The report shall not be reproduced without written approval from Intertek

The results relate only to the item tested.

Number: BKKH18009529

Test conducted:

Clause	Testing items	Assessment
4.23	Rattles	NA
4.24	Squeeze toys	NA
4.25	Battery-operated toys	NA
4.26	Toys intended to be attached to a crib or playpen	NA
4.27	Stuffed and beanbag-type toys	NA
4.28	Stroller and carriage toys	NA
4.29	Art materials	NA
4.30	Toy gun marking	NA
4.31	Balloons	NA
4.32	Certain toys with nearly spherical ends	NA
4.33	Marbles	NA
4.34	Balls	NA
4.35	Pompoms	NA
4.36	Hemispheric-shaped objects	NA
4.37	Yoyo elastic tether toys	NA
4.38	Magnets	NA
4.39	Jaw entrapment in handles and steering wheels	NA
4.40	Expanding materials	NA
4.41	Toy chests	NA
5	Labelling requirement	NA
6	Instructional literature	NA
7	Producer's markings - name of producer (toy and package) - address (package)	Yes Yes

Remark : P = Pass NA = Not applicable

▲ = Tested items are not included in the TISI Accreditation

The submitted samples were undergone the tests in accordance with clause 8.5 through clause 8.17 and 8.19 through 8.26 on normal use, abuse and specific tests for different types of toys whichever is applicable.

Testing period : July 20, 2018 to August 27, 2018

TEST REPORT

The report shall not be reproduced without written approval from Intertek
The results relate only to the item tested.

Number: BKKH18009529

Test conducted:

***1 Sound producing toys test**

Test Standard : ASTM Standard Consumer Safety Specification on Toy Safety F963-17, clause 4.5.

Clause	Test item	Assessment
4.5.1.1	A-weighted equivalent sound pressure level, L_{Aeq} , produced by close to the ear toys.	NA
4.5.1.2	Maximum A-weighted sound pressure level, L_{AFmax} , produced by the translational motion of floor or table top toys where the motion is imparted on the toy by the child.	NA
4.5.1.3	A-weighted equivalent sound pressure level, L_{Aeq} , produced by all other toys.	NA
4.5.1.4	C-weighted peak sound pressure level, L_{Cpeak} , produced by close to the ear toys.	NA
4.5.1.5	C-weighted peak sound pressure level, L_{Cpeak} , produced by any type of toy excluding toys using explosive action.	P
4.5.1.6	C-weighted peak sound pressure level, L_{Cpeak} , produced by a toy using percussion caps or other explosive action.	NA

Remark : P = Pass NA = Not applicable

<u>Tested component</u>	<u>Peak sound pressure level (L_{Cpeak})</u>	<u>Limit (db)</u>
Tambourine	109.4	115

Testing period : July 20, 2018 to August 27, 2018

TEST REPORT

The report shall not be reproduced without written approval from Intertek
The results relate only to the item tested.

Number: BKKH18009529

Test conducted:

2 Flammability Test[▲]

Test Standard : Clause 4.2 of the ASTM Standard Consumer Safety Specification for Toy Safety F963-16.

Results : Did not ignite

▲ = Tested items are not included in the TISI Accreditation

Testing period : July 20, 2018 to August 27, 2018



TEST REPORT

The report shall not be reproduced without written approval from Intertek

The results relate only to the item tested.

Number: BKKH18009529

Test conducted:

3 Heavy Elements Analysis

As per clause 4.3.5.1(2) of the ASTM Standard Consumer Safety Specification on Toy Safety F963-16, acid extraction method was used and heavy elements migration content were determined by ICP-OES analysis.

	<u>Result</u> <u>mg/kg</u>	<u>LOD</u> <u>mg/kg</u>	<u>LOQ</u> <u>mg/kg</u>	<u>Limit mg/kg</u>
(1)				
Sol. Barium (Ba)	572	1	5	1000
Sol. Lead (Pb)	ND	1	5	90
Sol. Cadmium (Cd)	ND	1	5	75
Sol. Antimony (Sb)	ND	2	5	60
Sol. Selenium (Se)	ND	1	5	500
Sol. Chromium (Cr)	ND	2	5	60
Sol. Mercury (Hg)	ND	1	5	60
Sol. Arsenic (As)	ND	2	5	25

Remark: Sol. = Soluble
mg/kg = Milligram per kilogram based on weight of sample; = ppm = Parts per million
LOD = Limit of Detection LOQ = Limit of Quantitation
ND = Not detected (Less than LOD)

Tested components:

(1) = BROWN COATING ON WOOD Refer BKKH18008771

Note: The results of soluble toxic elements were adjusted by subtracting the analytical correction factor.

TEST REPORT

The report shall not be reproduced without written approval from Intertek

The results relate only to the item tested.

Number: BKKH18009529

Test conducted:

Heavy Elements Analysis

As per clause 4.3.5.2(2)(b) of the ASTM Standard Consumer Safety Specification on Toy Safety F963-16, acid extraction method was used and heavy elements migration content were determined by ICP-OES analysis.

	<u>Result</u> <u>mg/kg</u>	<u>LOD</u> <u>mg/kg</u>	<u>LOQ</u> <u>mg/kg</u>	<u>Limit mg/kg</u>
(2)				
Sol. Barium (Ba)	<5	1	5	1000
Sol. Lead (Pb)	ND	1	5	90
Sol. Cadmium (Cd)	ND	1	5	75
Sol. Antimony (Sb)	ND	2	5	60
Sol. Selenium (Se)	ND	1	5	500
Sol. Chromium (Cr)	ND	2	5	60
Sol. Mercury (Hg)	ND	1	5	60
Sol. Arsenic (As)	ND	2	5	25

Remark: Sol. = Soluble
mg/kg = Milligram per kilogram based on weight of sample; = ppm = Parts per million
LOD = Limit of Detection LOQ = Limit of Quantitation
ND = Not detected (Less than LOD) < = Less than

Tested components:

(2) = BLUE SAWDUST Refer BKKH18001625

Note: The results of soluble toxic elements were adjusted by subtracting the analytical correction factor.

TEST REPORT

The report shall not be reproduced without written approval from Intertek

The results relate only to the item tested.

Number: BKKH18009529

Test conducted:

Total Lead (Pb) Content

As per clause 4.3.5.1(1) of the ASTM Standard Consumer Safety Specification on Toy Safety F963-16, test method CPSC-CH-E1003-09.1:2011 was used and total Lead content was determined by ICP-OES analysis.

(I) Surface coating

<u>Tested Component</u>	<u>Result</u> <u>mg/kg</u>	<u>LOD</u> <u>(mg/kg)</u>	<u>LOQ</u> <u>(mg/kg)</u>	<u>Limit</u> <u>(mg/kg)</u>
(1)	ND	2	13	90

Remark: mg/kg = Milligram per kilogram based on weight of sample; = ppm = Parts per million
LOD = Limit of Detection LOQ = Limit of Quantitation
ND = Not detected (Less than LOD)

Tested components:

(1) = BROWN COATING ON WOOD Refer BKKH18008771

Total Lead (Pb) Content

As per clause 4.3.5.2(2)(a) of the ASTM Standard Consumer Safety Specification on Toy Safety F963-16, test method CPSC-CH-E1001-08.3:2012, CPSC-CH-E1002-08.3:2012 were used and total Lead content was determined by ICP-OES analysis.

(II) Non-surface coating

<u>Tested Component</u>	<u>Result</u> <u>mg/kg</u>	<u>LOD</u> <u>(mg/kg)</u>	<u>LOQ</u> <u>(mg/kg)</u>	<u>Limit</u> <u>(mg/kg)</u>
(2)	<13	1	13	100
(3)	ND	2	13	100

Remark: mg/kg = Milligram per kilogram based on weight of sample; = ppm = Parts per million
LOD = Limit of Detection LOQ = Limit of Quantitation
ND = Not detected (Less than LOD) < = Less than

Tested components:

(2) = BLUE SAWDUST Refer BKKH18001625
(3) = Metal Sheet Refer BKKH18013588

TEST REPORT

The report shall not be reproduced without written approval from Intertek

The results relate only to the item tested.

Number: BKKH18009529

Test conducted:

4 Total Lead (Pb) content▲

As per U.S. Code of Federal Regulations title 16 Part 1303. Acid digestion method was used and total Lead content was determined by Inductively Couple Plasma Optical Emission Spectrometry.☐

<u>Tested component</u>	<u>Result %</u>	<u>LOD %</u>	<u>LOQ %</u>	<u>Limit %</u>
(1)	ND	0.0002	0.0013	0.0090

Remark: % = percentage
LOD = Limit of Detection
ND = Not detected (Less than LOD)
▲ = Tested items are not included in the TISI Accreditation
LOQ = Limit of Quantitation

Tested components:

(1) = BROWN COATING ON WOOD Refer BKKH18008771

5 Total lead (Pb) content in surface coating

As per U.S. Consumer Product Safety Improvement Act of 2008 (H.R. 4040), Title I, Section 101 for children's products containing Lead, CPSC-CH-E1003-09.1:2011 method was used and total Lead content was determined by Inductively Couple Plasma Optical Emission Spectrometry.

<u>Tested component</u>	<u>Result</u>	<u>LOD</u>	<u>LOQ</u>	<u>Limit mg/kg</u>
	<u>mg/kg</u>	<u>mg/kg</u>	<u>mg/kg</u>	
(1)	ND	2	13	90

Remark: mg/kg = Milligram per kilogram based on weight of sample; = ppm = Parts per million
LOD = Limit of Detection
ND = Not detected (Less than LOD)
LOQ = Limit of Quantitation

Tested components:

(1) = BROWN COATING ON WOOD Refer BKKH18008771

TEST REPORT

The report shall not be reproduced without written approval from Intertek

The results relate only to the item tested.

Number: BKKH18009529

Test conducted:

6 Total Lead (Pb) Content in Substrate Material- Children's Metal Product

As per U.S. Consumer Product Safety Improvement Act of 2008 (H.R. 4040), Title I, Section 101 for children's products containing Lead, CPSC-CH-E1001-08.3:2012 method was used and total Lead content was determined by Inductively Couple Plasma Optical Emission Spectrometry.

<u>Tested component</u>	<u>Result</u>	<u>LOD</u>	<u>LOQ</u>	<u>Limit mg/kg</u>
	<u>mg/kg</u>	<u>mg/kg</u>	<u>mg/kg</u>	
(1)	ND	2	13	100

Remark: mg/kg = Milligram per kilogram based on weight of sample; = ppm = Parts per million
 LOD = Limit of Detection LOQ = Limit of Quantitation
 ND = Not detected (Less than LOD)

Tested components:

(1) = Metal Sheet Refer BKKH18013588

Total lead (Pb) content in substrate material- non-metal children's product

As per U.S. Consumer product safety improvement Act of 2008 (H.R. 4040), Title I, Section 101 for children's products containing lead, CPSC-CH-E1002-08.3:2012 method was used and total lead content was determined by Inductively Couple Plasma Optical Emission Spectrometry.

<u>Tested component</u>	<u>Result</u>	<u>LOD</u>	<u>LOQ</u>	<u>Limit mg/kg</u>
	<u>mg/kg</u>	<u>mg/kg</u>	<u>mg/kg</u>	
(2)	<13	1	13	100

Remark: mg/kg = Milligram per kilogram based on weight of sample; = ppm = Parts per million
 LOD = Limit of Detection LOQ = Limit of Quantitation
 ND = Not detected (Less than LOD) < = Less than

Tested components:

(2) = BLUE SAWDUST Refer BKKH18001625

TEST REPORT

The report shall not be reproduced without written approval from Intertek

The results relate only to the item tested.

Number: BKKH18009529

Test conducted:

7 Phthalate content

As per CPSC-CH-C1001-09.3:2010 and U.S. Consumer Product Safety Improvement Act 2008 (H.R. 4040), Title I, Section 108 requirement on Phthalates, solvent extraction method was used and Phthalate content was determined by Gas Chromatographic-Mass Spectrometric (GC-MS) analysis.☐

	<u>Result</u> <u>(%, w/w)</u>		<u>LOD</u> <u>(%, w/w)</u>	<u>LOQ</u> <u>(%, w/w)</u>	<u>(16CFR1307)</u> <u>Limit (%, w/w)</u>	<u>NPR</u> <u>(%, w/w)</u>
	(1)	(2)				
Dibutyl Phthalate (DBP)	ND	ND	0.0015	0.0030	0.1	0.1
Di(2-ethylhexyl) phthalate (DEHP)	ND	ND	0.0015	0.0030	0.1	0.1
Benzyl butyl Phthalate (BBP)	ND	ND	0.0015	0.0030	0.1	0.1
Di-iso-nonyl Phthalate (DINP)	ND	ND	0.0015	0.0090	0.1	0.1
Di-n-octyl Phthalate (DNOP)	ND	ND	0.0015	0.0030	--	--
Di-iso-decyl Phthalate (DIDP)	ND	ND	0.0015	0.0090	--	--
Di-isobutyl phthalate (DIBP)▲	ND	ND	0.0015	0.0090	0.1	0.1
Di-n-pentyl phthalate (DPENP)▲	ND	ND	0.0015	0.0090	0.1	0.1
Di-n-hexyl phthalate (DHEXP)▲	ND	ND	0.0015	0.0090	0.1	0.1
Di-cyclohexyl phthalate (DCHP)▲	ND	ND	0.0015	0.0090	0.1	0.1
Diisooctyl phthalate (DIOP)▲	ND	ND	0.0015	0.0090	--	--

Remark : The above limit was quoted according to US 16 CFR Part 1307 for Prohibition of Children's Toys and Child Care Articles Containing Specified Phthalates except the Phthalate no.5-6,11 was conducted as per applicant requested only.

NPR = Notice of proposed rulemaking

%, w/w = Percentage weight by weight

LOD = Limit of Detection

LOQ = Limit of Quantitation

ND = Not detected (Less than LOD)

▲ = Tested items are not included in the TISI Accreditation

Tested components:

(1) = BLUE SAWDUST

Refer BKKH18001625

(2) = BROWN COATING ON WOOD

Refer BKKH18008771



TEST REPORT

The report shall not be reproduced without written approval from Intertek

The results relate only to the item tested.

Number: BKKH18009529

Test conducted:

8 Phthalate content test▲

By solvent extraction and Gas Chromatographic-Mass Spectrometric (GC-MS) analysis.

	<u>Result</u>		<u>LOD</u>	<u>LOQ</u>	<u>Limit</u>
	<u>(%, w/w)</u>		<u>(%, w/w)</u>	<u>(%, w/w)</u>	<u>(%, w/w)</u>
	(1)	(2)			
Dibutyl Phthalate (DBP)	ND	ND	0.0015	0.0030	0.1
Di(2-ethylhexyl) phthalate (DEHP)	ND	ND	0.0015	0.0030	0.1
Benzyl butyl Phthalate (BBP)	ND	ND	0.0015	0.0030	0.1
Di-iso-nonyl Phthalate (DINP)	ND	ND	0.0015	0.0090	0.1
Di-octyl Phthalate (DNOP)	ND	ND	0.0015	0.0030	0.1
Di-iso-decyl Phthalate (DIDP)	ND	ND	0.0015	0.0090	0.1
Di-n-hexyl Phthalate (DnHP)	ND	ND	0.0015	0.0030	0.1

Remark : % , w/w = Percentage weight by weight

LOD = Limit of Detection

LOQ = Limit of Quantitation

ND = Not detected (Less than LOD)

▲ = Tested items are not included in the TISI Accreditation

Note : The above limit was quoted according to the California Proposition 65

Tested components:

(1) =	BLUE SAWDUST	Refer	BKKH18001625
(2) =	BROWN COATING ON WOOD	Refer	BKKH18008771

TEST REPORT

The report shall not be reproduced without written approval from Intertek
The results relate only to the item tested.

Number: BKKH18009529

Test conducted:

9 Total Lead (Pb) Content[▲]

As per Illinois Lead poisoning prevention act 410 ILCS 45 section 6 (public act 095-1019), acid digestion method was used and total Lead content was determined by Inductively Couple Plasma Optical Emission Spectrometry.

I Surface coating material

<u>Tested component</u>	<u>Result</u>	<u>LOD</u>	<u>LOQ</u>	<u>Limit</u>
	<u>mg/kg</u>	<u>mg/kg</u>	<u>mg/kg</u>	<u>mg/kg</u>
(1)	ND	2	13	90

Remark:

mg/kg = Milligram per kilogram based on weight of sample; = ppm = Parts per million

LOD = Limit of Detection

LOQ = Limit of Quantitation

ND = Not detected (Less than LOD)

[▲] = Tested items are not included in the TISI Accreditation

Requirement:

According to Illinois Lead poisoning prevention act 410 ILCS 45 section 6 (public act 095-019), appropriate warning statement is required when the Lead content of the submitted sample is more than 40 ppm but less than 90 ppm for surface coatings and less than 100 ppm for substrates by total weight or a lower standard for Lead content as may be established by federal or state law or regulation.

Tested components:

(1) = BROWN COATING ON WOOD Refer BKKH18008771

TEST REPORT

The report shall not be reproduced without written approval from Intertek

The results relate only to the item tested.

Number: BKKH18009529

Test conducted:

II Non-surface coating material (substrate)

<u>Tested component</u>	<u>Result</u>	<u>LOD</u>	<u>LOQ</u>	<u>Limit</u>
	<u>mg/kg</u>	<u>mg/kg</u>	<u>mg/kg</u>	<u>mg/kg</u>
(2)	<13	1	13	100
(3)	ND	2	13	100

Remark: < = Less than

mg/kg = Milligram per kilogram based on weight of sample; = ppm = Parts per million

LOD = Limit of Detection

LOQ = Limit of Quantitation

ND = Not detected (Less than LOD)

Requirement: According to Illinois Lead poisoning prevention act 410 ILCS 45 section 6 (public act 095-019), appropriate warning statement is required when the Lead content of the submitted sample is more than 40 ppm but less than 90 ppm for surface coatings and less than 100 ppm for substrates by total weight or a lower standard for Lead content as may be established by federal or state law or regulation.

Tested components:

(2) =	BLUE SAWDUST	Refer	BKKH18001625
(3) =	Metal Sheet	Refer	BKKH18013588

Note: LOD and LOQ value in this test report were effective since October, 2014

*****END*****/KS/NK

Except where explicitly agreed in writing, all work and services performed by Intertek is subject to our standard Terms and Conditions which can be obtained at our website: <http://www.intertek.com/terms/>. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. This report is made solely on the basis of your instructions and / or information and materials supplied by you and provide no warranty on the tested sample(s) be truly representative of the sample source. The report is not intended to be a recommendation for any particular course of action, you are responsible for acting as you see fit on the basis of the report results. Intertek is under no obligation to refer to or report upon any facts or circumstances which are outside the specific instructions received and accepts no responsibility to any parties whatsoever, following the issue of the report, for any matters arising outside the agreed scope of the works. This report does not discharge or release you from your legal obligations and duties to any other person. You are the only one authorized to permit copying or distribution of this report (and then only in its entirety). Any such third parties to whom this report may be circulated rely on the content of the report solely at their own risk. This report shall not be reproduced, except in full.