

TEST REPORT

Number: BKKH14016079

Feb 10, 2015

Date:

Applicant: PLAN CREATIONS CO., LTD.

8 MOO 8, TRANG-PALIAN RD.,

YANTAKAO, TRANG, THAILAND 92140 ATTN: K.NARONG, K.SUPAPORN

Sample description:

One (1) set of submitted sample said to be TOY CHEST

Item Name: TOY CHEST

Item Number: 8601

Date Sample Received:

Date information Resubmitted:

Date sample resubmitted:

December15, 2014

February 06, 2015

February 09, 2015



BKKH14016079

Test conducted:

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

To be continued

Authorized by:

For Intertek Testing Services (Thailand)

Ladtaka Wongwiboonporn Laboratory Manager Hardlines Department

Intertek Testing Services (Thailand) Ltd.

5/1 Soi Chaloem Suk, Chankasem, Chatuchak, Bangkok 10900 Thailand Tel.: (662) 930-6554, (662) 939-0661 Fax: (662) 939-0191



TEST REPORT

Number: BKKH14016079
Conclusion:

<u>Tested samples</u> <u>Standard - U.S. ASTM F963-11</u> <u>Result</u>

Submitted sample U.S. ASTM F963-11 for Physical and mechanical tests Pass

U.S. ASTM F963-11 for flammability test of materials Pass

other than textile materials

Heavy Elements Test Pass

Standard - U.S. CFR title 16

(CPSC regulations) Pass

Part 1303 total Lead content

Standard

U.S. Consumer product safety improvement Pass

Act 2008(H.R. 4040) Title I, Section 101 For total lead content in surface coating

U.S. Consumer product safety improvement Pass

Act 2008(H.R. 4040) Title I, Section 101

For total lead content in non-surface coating material (substrate)

U.S. Consumer product safety improvement Pass

Act 2008(H.R. 4040) Title I, Section 108

Requirement on phthalates

Phthalate Content Requirement base Pass

on the California Proposition 65

Illinois Lead Poisoning Prevention Pass

Act 410 ILCS 45 section 6 (public act 095-1019)

Intertek Testing Services (Thailand) Ltd.

5/1 Soi Chaloem Suk, Chankasem, Chatuchak, Bangkok 10900 Thailand Tel.: (662) 930-6554, (662) 939-0661 Fax: (662) 939-0191



TEST REPORT

Remark:

- 1 As requested by the applicant, phthalate test was conducted only on components listed in this report. Other components were not tested. However, according to CPSIA FAG, the prohibition of phthalate content under CPSIA applies to all parts of a product.
- 2 The toxic elements of ASTM F963-11 was not conducted on the below components of samples. Applicant claimed the components were tested on our previous test report. Details were as below.
- 3 The total lead (Pb) content in surface coating and total lead (Pb) content in substrate material-non-metal children's product was not conducted on the below components of samples. Applicant claimed the components were tested on our previous test report. Details were as below.
- 4 The Phthalate content of CPSIA and California Proposition 65 was not conducted on the below components of samples. Applicant claimed the components were tested on our previous test report. Details were as below.

Components ASTM	Report No.	<u>Date</u>
5329128 PRINT INK BROWN	BKKH14006467S2	Oct 31, 2014
SOLID WOOD	BKKH14014940	Nov 20, 2014
PLYWOOD	BKKH14006465	May 21, 2014
5023014 Blue	BKKH14009216S1	Nov 04, 2014
5023015 Orange	BKKH14009216S1	Nov 04, 2014
Lead in surface coating		
5329128 PRINT INK BROWN	BKKH14006467S2	Oct 31, 2014
Lead in substrate		
SOLID WOOD	BKKH14014940	Nov 20, 2014
PLYWOOD	BKKH14006465	May 21, 2014
5023014 Blue	BKKH14009216S1	Nov 04, 2014
5023015 Orange	BKKH14009216S1	Nov 04, 2014
5330005/5333734 Screw Pan Head	BKKH15001265	Feb 04, 2015
Phthalate content		
PLYWOOD	BKKH14015373	Dec 02, 2014
5023014 Blue	BKKH14009216S1	Nov 04, 2014
5023015 Orange	BKKH14009216S1	Nov 04, 2014
5329128 PRINT INK BROWN	BKKH14006467S2	Oct 31, 2014

Intertek Testing Services (Thailand) Ltd.

5/1 Soi Chaloem Suk, Chankasem, Chatuchak, Bangkok 10900 Thailand Tel.: (662) 930-6554, (662) 939-0661 Fax: (662) 939-0191

E-mail Address: tfh.thailand@intertek.com



TEST REPORT

Test conducted:

1 Physical And Mechanical Tests

As per the ASTM Standard Consumer Safety Specification for Toy Safety F963-11. Applicant's specified age group for testing: For age 3-6 years.

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** <u>Parameter</u> Drop test Section 1500.53(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

Section	<u>Testing items</u>	<u>Assessment</u>
4.1	Material quality (visual check on cleanliness)	Р
4.5	Sound-producing toys	NA
4.6.1	Toys intended for children under 36 months (small objects)	NA
4.6.2	Mouth-actuated toys	NA
4.6.3	Toys and games for 36 months to 72 months (small part warning)	Р
4.7	Accessible edges	Р
4.8	Projections	NA
4.9	Accessible points	Р
4.10	Wires or rods	NA
4.11	Nails and fasteners	NA
4.12	Packaging 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

Intertek Testing Services (Thailand) Ltd.

5/1 Soi Chaloem Suk, Chankasem, Chatuchak, Bangkok 10900 Thailand Tel.: (662) 930-6554, (662) 939-0661 Fax: (662) 939-0191



TEST REPORT

Test conducted:

<u>Section</u>	<u>Testing items</u>	<u>Assessment</u>
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
5	Labelling requirement	Р
6	Instructional literature	NA
7	Producer's markings	
	- name of producer/distributor (toy and package)	Yes
	- address (package)	Yes

Remark: P = Pass NA = Not applicable

The submitted samples were undergone the tests in accordance with section 8.5 through section 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: December 16, 2014 to February 09, 2015

2 Flammability Test

As per Section 4.2 of the ASTM Standard Consumer Safety Specification for Toy Safety F963-11

Results: Did Not Ignite

Testing period: December 16, 2014 to December 18, 2014

Intertek Testing Services (Thailand) Ltd.

5/1 Soi Chaloem Suk, Chankasem, Chatuchak, Bangkok 10900 Thailand Tel.: (662) 930-6554, (662) 939-0661 Fax: (662) 939-0191

E-mail Address: tfh.thailand@intertek.com



TEST REPORT

Test conducted:

3 Heavy Elements Analysis in Surface Coating

As per Section 4.3.5.1 of the ASTM Standard Consumer Safety Specification on Toy Safety F963-11 , CPSC-CH-E1003-09.1 and extraction methods were used and heavy elements content were determined by Inductively Coupled Argon Plasma Spectrometry.

		Result	<u>LOD</u>	<u>LOQ</u>	<u>Limit</u>
		<u>mg/kg</u>	mg/kg	mg/kg	mg/kg
	(1)				
Total Lead (Pb)	< 10		2	13	90
Sol. Barium (Ba)	< 4		0.7	4	1000
Sol. Lead (Pb)	< 4		0.7	4	90
Sol. Cadmium (Cd)	< 4		0.7	4	75
Sol. Antimony (Sb)	< 2		0.8	2	60
Sol. Selenium (Se)	< 2		0.4	2	500
Sol. Chromium (Cr)	< 4		0.7	4	60
Sol. Mercury (Hg)	< 3		1	3	60
Sol. Arsenic (As)	< 1		0.8	2	25

Remark: Sol. = Soluble

< = 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)

Tested components:

(1) = 5329128 PRINT INK BROWN

Refer BKKH14006467S2

Number: BKKH14016079

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

Intertek Testing Services (Thailand) Ltd.

5/1 Soi Chaloem Suk, Chankasem, Chatuchak, Bangkok 10900 Thailand Tel.: (662) 930-6554, (662) 939-0661 Fax: (662) 939-0191



TEST REPORT

Test conducted:

Heavy Elements Analysis in Non-Surface Coating Materials (Substrate except modelling clay) As per Section 4.3.5.2(2)(b) of the ASTM Standard Consumer Safety Specification on Toy Safety F963-11, CPSC-CH-E1001-08.3, CPSC-CH-E1002-08.3 and acid extraction method was used and heavy elements migration content were determined by Inductively Coupled Argon Plasma Spectrometry.

			Result		<u>L</u>	<u>.OD</u>	<u>LOQ</u>	<u>Limit</u>
			mg/kg		<u>m</u>	g/kg	mg/kg	mg/kg
	(2)	(3)	(4)	(5)				
Total Lead (Pb)	< 13	< 10	< 10	< 10		1	13	100
Sol. Barium (Ba)	< 4	< 4	< 4	< 4		0.7	4	1000
Sol. Lead (Pb)	ND	< 4	< 4	< 4		0.7	4	90
Sol. Cadmium (Cd)	ND	< 4	< 4	< 4		0.7	4	75
Sol. Antimony (Sb)	ND	< 2	< 2	< 2		8.0	2	60
Sol. Selenium (Se)	ND	< 2	< 2	< 2		0.4	2	500
Sol. Chromium (Cr)	ND	< 4	< 4	< 4		0.7	4	60
Sol. Mercury (Hg)	ND	< 3	< 3	< 3		1	3	60
Sol. Arsenic (As)	ND	<1	< 1	< 1		8.0	2	25

Remark: Sol. = Soluble

< = Less than

mg/kg = Milligram per kilogram = ppm = Parts per million

LOD = Limit of Detection LOQ = Limit of Quantitation

ND = Not detected (Less than LOD)

Tested components:

(2) =	•	SOLID WOOD	Refer	BKKH14014940
(3) =		PLYWOOD	Refer	BKKH14006465
(4) =	5023014	Blue	Refer	BKKH14009216S1
(5) =	5023015	Orange	Refer	BKKH14009216S1

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

Intertek Testing Services (Thailand) Ltd.

5/1 Soi Chaloem Suk, Chankasem, Chatuchak, Bangkok 10900 Thailand Tel.: (662) 930-6554, (662) 939-0661 Fax: (662) 939-0191



TEST REPORT

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.

Tested component	<u>Result</u>	<u>LOD</u>	<u>LOQ</u>	<u>Limit</u>
	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>
(1)	< 0.001	0.0002	0.0013	0.009

Remark: % = percentage

< = Less than</p>
LOD = Limit of Detection
LOQ = Limit of Quantitation

Tested components:

(1) = 5329128 PRINT INK BROWN

Refer BKKH14006467S2

Number: BKKH14016079

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 method was used and total Lead content was determined by Inductively Couple Plasma Optical Emission Spectrometry.

Tested component	Result	<u>LOD</u>	<u>LOQ</u>	<u>Limit</u>
	<u>mg/kg</u>	mg/kg	mg/kg	<u>mg/kg</u>
(1)	< 10	2	13	90

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

Tested components:

1) = 5329128 PRINT INK BROWN Refer BKKH14006467S2

Intertek Testing Services (Thailand) Ltd.

5/1 Soi Chaloem Suk, Chankasem, Chatuchak, Bangkok 10900 Thailand Tel.: (662) 930-6554, (662) 939-0661 Fax: (662) 939-0191



TEST REPORT

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 method was used and total Lead c ontent was determined by Inductively Couple Plasma Optical Emission Spectrometry.

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

Remark: <= Less than

mg/kg = Milligram per kilogram = ppm = Parts per million

LOD = Limit of Detection LOQ = Limit of Quantitation

ND = Not detected (Less than LOD)

Tested components:

(1) = 5330005/5 Screw Pan Head

Refer BKKH15001265

Number: BKKH14016079

6 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 method was used and total lead content was determined by Inductively Couple Plasma Optical Emission Spectrometry.

Tested component	Result	LOD	<u>LOQ</u>	<u>Limit</u>
	<u>mg/kg</u>	<u>mg/kg</u>	mg/kg	<u>mg/kg</u>
(1)	< 13	1	13	100
(2)	< 10	1	13	100
(3)	< 10	1	13	100
(4)	< 10	1	13	100

Remark: <= Less than

mg/kg = Milligram per kilogram = ppm = Parts per million

LOD = Limit of Detection LOQ = Limit of Quantitation

ND = Not detected (Less than LOD)

Tested components:

(1) =	•	SOLID WOOD	Refer	BKKH14014940
(2) =		PLYWOOD	Refer	BKKH14006465
(3) =	5023014	Blue	Refer	BKKH14009216S1
(4) =	5023015	Orange	Refer	BKKH14009216S1

Intertek Testing Services (Thailand) Ltd.

5/1 Soi Chaloem Suk, Chankasem, Chatuchak, Bangkok 10900 Thailand Tel.: (662) 930-6554, (662) 939-0661 Fax: (662) 939-0191



TEST REPORT

Test conducted:

7 Phthalate content

As per CPSC-CH-C1001-09.3 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.

(I) For children's toy or child care article

	<u>Result</u>				<u>Limit</u>
	<u>(%, w/w)</u>				<u>(%, w/w)</u>
	(1)	(2)	(3)	(4)	
Dibutyl Phthalate (DBP)	< 0.003	< 0.003	< 0.003	< 0.003	0.1
Diethyl hexyl Phthalate (DEHP)	< 0.003	< 0.003	< 0.003	< 0.003	0.1
Benzyl butyl Phthalate (BBP)	< 0.003	< 0.003	< 0.003	< 0.003	0.1

(II) For children's toy that can be placed in a child's mouth or child care article

			Result		<u>Limit</u>
			(%, w/w)		<u>(%, w/w)</u>
	(1)	(2)	(3)	(4)	
Di-iso-nonyl Phthalate (DINP)	< 0.009	< 0.003	< 0.003	< 0.003	0.1
Di-n-octyl Phthalate (DNOP)	< 0.003	< 0.003	< 0.003	< 0.003	0.1
Di-iso-decyl Phthalate (DIDP)	< 0.009	< 0.003	< 0.003	< 0.003	0.1

Remark: < = Less than

Reporting limit = 0.003% (For DINP, DIDP = 0.009%)

ND = Not detected (Less than reporting limit)

Tested components:

(1) =		PLYWOOD	Refer	BKKH14015373
(2) =	5023014	Blue	Refer	BKKH14009216S1
(3) =	5023015	Orange	Refer	BKKH14009216S1
(4) =	5329128	PRINT INK BROWN	Refer	BKKH14006467S2

Intertek Testing Services (Thailand) Ltd.

5/1 Soi Chaloem Suk, Chankasem, Chatuchak, Bangkok 10900 Thailand Tel.: (662) 930-6554, (662) 939-0661 Fax: (662) 939-0191



TEST REPORT

Number: BKKH14016079
Test conducted:

rest conducted.

8 Phthalate content test

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

			Result		<u>Limit</u>
			(%, w/w)		<u>(%, w/w)</u>
	(1)	(2)	(3)	(4)	
Dibutyl Phthalate (DBP)	ND	ND	ND	ND	0.1
Diethyl hexyl Phthalate (DEHP)	ND	ND	ND	ND	0.1
Benzyl butyl Phthalate (BBP)	ND	ND	ND	ND	0.1
Di-iso-nonyl Phthalate (DINP)	ND	ND	ND	ND	0.1
Dioctyl Phthalate (DNOP)	ND	ND	ND	ND	0.1
Di-iso-decyl Phthalate (DIDP)	ND	ND	ND	ND	0.1
Di-n-hexyl Phthalate (DnHP)	ND	ND	ND	ND	0.1

Remark: < = Less than

Reporting limit = 0.003% (For DINP, DIDP = 0.009%)

ND = Not detected (Less than reporting limit)

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

Tested components:

(1) =	•	PLYWOOD	Refer	BKKH14015373
(2) =	5023014	Blue	Refer	BKKH14009216S1
(3) =	5023015	Orange	Refer	BKKH14009216S1
(4) =	5329128	PRINT INK BROWN	Refer	BKKH14006467S2

5/1 Soi Chaloem Suk, Chankasem, Chatuchak, Bangkok 10900 Thailand Tel.: (662) 930-6554, (662) 939-0661 Fax: (662) 939-0191



TEST REPORT

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

Tested component	<u>Result</u>	<u>LOD</u>	LOQ	<u>Limit</u>
	<u>mg/kg</u>	mg/kg	mg/kg	<u>mg/kg</u>
(1)	< 10	2	13	90

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:

(1) = 5329128 PRINT INK BROWN Refer BKKH14006467S2

Intertek Testing Services (Thailand) Ltd.

5/1 Soi Chaloem Suk, Chankasem, Chatuchak, Bangkok 10900 Thailand Tel.: (662) 930-6554, (662) 939-0661 Fax: (662) 939-0191



TEST REPORT

Test conducted:

II Non-surface coating material (substrate)

Tested component	<u>Result</u>	<u>LOD</u>	<u>LOQ</u>	<u>Limit</u>	
	<u>mg/kg</u>	<u>mg/kg</u>	mg/kg	mg/kg	
(2)	< 13	2	13	100	
(3)	< 10	2	13	100	
(4)	< 10	2	13	100	
(5)	< 10	2	13	100	
(6)	ND	2	13	100	

Remark: <= Less than

mg/kg = Milligram per kilogram = ppm = Parts per million

LOD = Limit of Detection LOQ = Limit of Quantitation

ND = Not detected (Less than LOD)

Requirement: According

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)	= SOLID WC	OD	Refer	BKKH14014940
(3)	= PLYWOOD)	Refer	BKKH14006465
(4)	= 5023014 Blue		Refer	BKKH14009216S1
(5)	= 5023015 Orange		Refer	BKKH14009216S1
(6)	= 5330005/5333734	Screw Pan Head	Refer	BKKH15001265

This report is made solely on the basis of your instructions and/or information and materials supplied by you. It is not intended to be a recommendation for any particular course of action. Intertek does not accept a duty of care or any other responsibility to any person other than the Addressee in respect of this report and only accepts liability to the Client insofar as is expressly contained in the terms and conditions governing Intertek 's provision of services to you. Intertek makes no warranties or representations either express or implied with respect to this report save as provided for in those terms and conditions. We have aimed to conduct the Review on a diligent and careful basis and we do not accept any liability to you for any loss arising out of or in connection with this report, in contract, tort, by statute.

Intertek Testing Services (Thailand) Ltd.

5/1 Soi Chaloem Suk, Chankasem, Chatuchak, Bangkok 10900 Thailand Tel.: (662) 930-6554, (662) 939-0661 Fax: (662) 939-0191

E-mail Address: tfh.thailand@intertek.com