

#### **TEST REPORT**

Number: BKKH17002819

May 04, 2017

Date:

Applicant: PLAN CREATIONS CO., LTD.

8 MOO 8, TRANG-PALIAN RD.,

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

#### Sample description:

Quantity of sample: One (1) set
Sample description: Wooden toy
Date sample received: March 01, 2017
Date information received: May 03, 2017

#### **Client Information:**

One (1) set of submitted sample said to be BIRD HOUSE II

Item Name: BIRD HOUSE II

Item Number: 8607





# 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) Ltd.,

Hardlines Laboratory

Ladtaka Wongwiboonporn Laboratory Manager

Laboratory Manager Hardlines Department

#### Intertek Testing Services (Thailand) Ltd.

1285/5 Prachachuen Road, Wong-Sawang, Bangsue, Bangkok 10800 Thailand

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The results relate only to the item tested.

#### **TEST REPORT**

Conclusion:

<u>Tested samples</u> Submitted sample

Remark:

Standard

U.S. ASTM F963-16 for Flammability test of materials

other than textile materials

U.S. ASTM F963-16 for Heavy elements Test

Standard - U.S. CFR title 16

(CPSC regulations)

Part 1303 total Lead content

Standard

U.S. Consumer product safety improvement Act 2008(H.R. 4040) Title I, Section 101 For total lead content in surface coating

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)

U.S. Consumer product safety improvement Act 2008(H.R. 4040) Title I, Section 108

Requirement on phthalates

Phthalate Content Requirement base on the California Proposition 65

Illinois Lead Poisoning Prevention

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

As requested by the applicant, the test was conducted only on components listed in this report.

Other components were not tested.

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Result

Pass

**Pass** 

**Pass** 

**Pass** 

Pass

**Pass** 

Pass

**Pass** 



#### **TEST REPORT**

Number: BKKH17002819

#### 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.

Components	Report No.	<u>Date</u>
ASTM F963-11: Heavy metal		
LACQUER COATING ON WOOD	BKKH16008147	Jun 09,2016
White Sawdust 5%	BKKH16007214	May 23,2016
ROPE COTTON	BKKH16016708	Nov 29,2016
GREEN SAWDUST (375C)	BKKH16017877	Dec 29,2016
Solid Wood	BKKH17000142	Jan 10,2017
ASTM F963-16: Heavy metal		
CREAM PLASTIC JOINT	BKKH17003197	Mar 13,2017
Lead in surface coating		
LACQUER COATING ON WOOD	BKKH16008147	Jun 09,2016
Lead in substrate		
White Sawdust 5%	BKKH16007214	May 23,2016
ROPE COTTON	BKKH16016708	Nov 29,2016
GREEN SAWDUST (375C)	BKKH16017877	Dec 29,2016
Solid Wood	BKKH17000142	Jan 10,2017
CREAM PLASTIC JOINT	BKKH17003197	Mar 13,2017
Phthalate content		
White Sawdust 5%	BKKH16007214	May 23,2016
LACQUER COATING ON WOOD	BKKH16008147	Jun 09,2016
GREEN SAWDUST (375C)	BKKH16017877	Dec 29,2016
CREAM PLASTIC JOINT	BKKH17003197	Mar 13,2017



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#### **TEST REPORT**

Test conducted:

#### 1 Heavy Elements Analysis

As per clause 4.3.5.1(2) of the ASTM Standard Consumer Safety Specification on Toy Safety F963-11, acid extraction method was used and heavy elements migration content were determined by ICP-OES analysis.

		<u>Result</u> mg/kg	<u>LOD</u> mg/kg	<u>LOQ</u> mg/kg	Limit mg/kg
	(1)				
Sol. Barium (Ba)	ND		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) = LACQUER COATING ON WOOD Refer BKKH16008147

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

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#### **TEST REPORT**

Test conducted:

#### **Heavy Elements Analysis**

As per clause 4.3.5.2(2)(b) of the ASTM Standard Consumer Safety Specification on Toy Safety F963-11, acid extraction method was used and heavy elements migration content were determined by ICP-OES analysis.

			Result			LOD	<u>LOQ</u>	Limit mg/kg
			mg/kg			<u>mg/kg</u>	mg/kg	
	(2)	(3)	(4)	(5)	(6)			
Sol. Barium (Ba)	ND	ND	<4	ND	ND	1	5	1000
Sol. Lead (Pb)	ND	ND	<4	ND	ND	1	5	90
Sol. Cadmium (Cd)	ND	ND	ND	ND	ND	1	5	75
Sol. Antimony (Sb)	ND	ND	ND	ND	ND	2	5	60
Sol. Selenium (Se)	ND	ND	ND	ND	ND	1	5	500
Sol. Chromium (Cr)	ND	ND	ND	ND	ND	2	5	60
Sol. Mercury (Hg)	ND	ND	ND	ND	ND	1	5	60
Sol. Arsenic (As)	ND	ND	ND	ND	ND	2	5	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:

(2) =	White Sawdust 5%	Refer	BKKH16007214
(3) =	ROPE COTTON	Refer	BKKH16016708
(4) =	GREEN SAWDUST (375C)	Refer	BKKH16017877
(5) =	Solid Wood	Refer	BKKH17000142
(6) =	CREAM PLASTIC JOINT	Refer	BKKH17003197

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

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#### **TEST REPORT**

Test conducted:

#### Total Lead (Pb) Content

As per clause 4.3.5.1(1) of the ASTM Standard Consumer Safety Specification on Toy Safety F963-11, test method CPSC-CH-E1003-09.1:2011 was used and total Lead content was determined by ICP-OES analysis.

#### (I) Surface coating

Tested Component	<u>Result</u>	<u>LOD LOQ</u>	<u>Limit</u>
	<u>mg/kg</u>	<u>(mg/kg)</u> (mg/kg)	<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) = LACQUER COATING ON WOOD

Refer BKKH16008147

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#### Total Lead (Pb) Content

As per clause 4.3.5.2(2)(a) of the ASTM Standard Consumer Safety Specification on Toy Safety F963-11 and 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

Tested Component	<u>Result</u>	<u>LOD LOQ</u>	<u>Limit</u>
<del></del>	<u>mg/kg</u>	<u>(mg/kg)</u> (mg/kg)	<u>(mg/kg)</u>
(2)	ND	1 13	100
(3)	ND	1 13	100
(4)	<13	1 13	100
(5)	ND	1 13	100
(6)	ND	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)

# Tested components:

(2) =	White Sawdust 5%	Refer	BKKH16007214
(3) =	ROPE COTTON	Refer	BKKH16016708
(4) =	GREEN SAWDUST (375C)	Refer	BKKH16017877
(5) =	Solid Wood	Refer	BKKH17000142
(6) =	CREAM PLASTIC JOINT	Refer	BKKH17003197

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#### **TEST REPORT**

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# Test conducted:

#### 2 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>
(1)	ND	0.0002 0.0013	0.009

Remark:

% = percentage

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) = LACQUER COATING ON WOOD

Refer BKKH16008147

#### 3 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.

Tested component	<u>Result</u>	<u>LOD</u>	<u>LOQ</u>	<u>Limit mg/kg</u>
	<u>mg/kg</u>	mg/kg	mg/kg	
(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) = LACQUER COATING ON WOOD Refer BKKH16008147

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#### **TEST REPORT**

Test conducted:

# 4 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.

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

#### Tested components:

(1) =	White Sawdust 5%	Refer BKKH16007214
(2) =	ROPE COTTON	Refer BKKH16016708
(3) =	GREEN SAWDUST (375C)	Refer BKKH16017877
(4) =	Solid Wood	Refer BKKH17000142
(5) <b>=</b>	CREAM PLASTIC JOINT	Refer BKKH17003197

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#### **TEST REPORT**

Test conducted:

# 5 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.

			Result			<u>LOD</u>	<u>LOQ</u>	<u>Limit</u>	NPR
			(%, w/w)		<u>(</u> 9	<u>%, w/w)</u>	(%, w/w)	<u>(%, w/w)</u>	(%, w/w)
	(1)	(2)	(3)	(4)					
Dibutyl Phthalate (DBP)	ND	ND	ND	ND	(	0.0015	0.003	0.1	0.1
Diethyl hexyl Phthalate (DEHP)	ND	ND	ND	ND	(	0.0015	0.003	0.1	0.1
Benzyl butyl Phthalate (BBP)	ND	ND	ND	ND	(	0.0015	0.003	0.1	0.1
Di-iso-nonyl Phthalate (DINP)	ND	ND	ND	ND	(	0.0015	0.009	0.1	0.1
Di-n-octyl Phthalate (DNOP)	ND	ND	ND	ND	(	0.0015	0.003	0.1	
Di-iso-decyl Phthalate (DIDP)	ND	ND	ND	ND	(	0.0015	0.009	0.1	
Di-isobutyl phthalate (DIBP)	ND	ND	ND	ND	(	0.0015	0.009		0.1
Di-n-pentyl phthalate (DnPP)	ND	ND	ND	ND	(	0.0015	0.009		0.1
Di-n-hexyl phthalate (DnHP)	ND	ND	ND	ND	(	0.0015	0.009		0.1
Di-cyclohexyl phthalate (DCHP)	ND	ND	ND	ND	(	0.0015	0.009		0.1
Diisooctyl phthalate (DIOP)	ND	ND	ND	ND	(	0.0015	0.009		

Remark: The above limit was quoted according to US Consumer Product Safety Improvement Act 2008 for prohibition on sale of certain products containing specified phthalates.

NPR = Notice of proposed rulemaking

LOD = Limit of Detection LOQ = Limit of Quantitation

ND = Not detected (Less than LOD) %, w/w = Percentage weight by weight

#### Tested components:

(1) =	White Sawdust 5%	Refer	BKKH16007214
(2) =	LACQUER COATING ON WOOD	Refer	BKKH16008147
(3) =	GREEN SAWDUST (375C)	Refer	BKKH16017877
(4) =	CREAM PLASTIC JOINT	Refer	BKKH17003197

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#### **TEST REPORT**

Test conducted:

# 6 Phthalate content test

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

			Result		<u>LOD</u>	<u>LOQ</u>	<u>Limit</u>
			(%, w/w)		<u>(%, w/w)</u>	(%, w/w)	(%, w/w)
	(1)	(2)	(3)	(4)			
Dibutyl Phthalate (DBP)	ND	ND	ND	ND	0.0015	0.003	0.1
Diethyl hexyl Phthalate (DEHP)	ND	ND	ND	ND	0.0015	0.003	0.1
Benzyl butyl Phthalate (BBP)	ND	ND	ND	ND	0.0015	0.003	0.1
Di-iso-nonyl Phthalate (DINP)	ND	ND	ND	ND	0.0015	0.009	0.1
Dioctyl Phthalate (DNOP)	ND	ND	ND	ND	0.0015	0.003	0.1
Di-iso-decyl Phthalate (DIDP)	ND	ND	ND	ND	0.0015	0.009	0.1
Di-n-hexyl Phthalate (DnHP)	ND	ND	ND	ND	0.0015	0.003	0.1

Remark : LOD = Limit of Detection

LOQ = Limit of Quantitation

ND = Not detected (Less than LOD) %, w/w = Percentage weight by weight

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

# Tested components:

(1) =	White Sawdust 5%	Refer	BKKH16007214
(2) =	LACQUER COATING ON WOOD	Refer	BKKH16008147
(3) =	GREEN SAWDUST (375C)	Refer	BKKH16017877
(4) =	CREAM PLASTIC JOINT	Refer	BKKH17003197

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#### **TEST REPORT**

Test conducted:

#### 7 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>	LOD LOQ	<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)

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)	=	LACQUER COATING ON WOOD	Refer	BKKH16008147
	******	******************	*******	*******

#### Intertek Testing Services (Thailand) Ltd.



#### **TEST REPORT**

Test conducted:

Non-surface coating material (substrate)

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

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)	=	White Sawdust 5%	Refer	BKKH16007214
(3)	=	ROPE COTTON	Refer	BKKH16016708
(4)	=	GREEN SAWDUST (375C)	Refer	BKKH16017877
(5)	=	Solid Wood	Refer	BKKH17000142
(6)	=	CREAM PLASTIC JOINT	Refer	BKKH17003197

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

Number: BKKH17002819

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