

The report shall not be reproduced without written approval from Intertek

Number: BKKH20005473

Issued Date: Aug 05, 2020

The results relate only to the item tested.

Applicant: PLAN CREATIONS CO., LTD.

8 MOO 8, TRANG-PALIAN RD.,

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

Sample description:

Quantity of sample: One (1) set Sample description: Wooden toy Date sample received: May 20, 2020 Date information received: July 21, 2020

Client Information:

One (1) set of submitted sample said to be CREATIVE SAND PLAY

Item Name: **CREATIVE SAND PLAY**

Item Number: 5804 Label Age grading: 2y+ Country of origin: Thailand







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

adtale

Ladtaka Wongwiboonporn

Laboratory Manager **Hardlines Department**

Page 1 of 12







The report shall not be reproduced without written approval from Intertek

Number: BKKH20005473

The results relate only to the item tested.

_			•	
ı.v	nc	lusi	ınn	٠.
υU	IIL	ıus	w	١.

CONTRACTOR.		
<u>Tested samples</u> Submitted sample	Standard U.S. ASTM F963-17 for Physical and mechanical tests	<u>Result</u> Pass
Submitted sample	0.3. ASTIVIT 703-17 for Fflysical and mechanical tests	газз
	U.S. ASTM F963-17 for Flammability test of materials	Pass
	other than textile materials	
	U.S. ASTM F963-17	Pass
	for Heavy elements Test	
	Standard - U.S. CFR title 16	
	(CPSC regulations)	Pass
	Part 1303 total Lead content	
	<u>Standard</u>	5
	U.S. Consumer product safety improvement Act 2008(H.R. 4040) Title I, Section 101	Pass
	For total lead content in surface coating	
	, 6, (6,4) 1844 85.118.11	
	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 (substr	rate)
	US 16 CFR Part 1307 for Prohibition of Children's Toys	Pass
	and Child Care Articles Containing Specified Phthalates	
	Dhthalata Cantont Daguirament hasa	Pass
	Phthalate Content Requirement base on the California Proposition 65	1 433
	Illinois Lead Poisoning Prevention Act 410 ILCS 45 section 6 (public act 095-1019)	Pass
	ACT 4 TO IECS 43 SECTION O (PUBLIC ACT 033-10 19)	





The report shall not be reproduced without written approval from Intertek



The results relate only to the item tested.

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>	Report No.	<u>Date</u>
ASTM F963-17: Heavy metal		
LIGHT GREEN SAWDUST	BKKH19008027S1	Jul 18, 2019
YELLOW SAWDUST	BKKH19008027S1	Jul 18, 2019
RED SAWDUST	BKKH19008027S1	Jul 18, 2019
BLUE SAWDUST	BKKH19008027S1	Jul 18, 2019
<u>Lead in substrate</u>		
LIGHT GREEN SAWDUST	BKKH19008027S1	Jul 18, 2019
YELLOW SAWDUST	BKKH19008027S1	Jul 18, 2019
RED SAWDUST	BKKH19008027S1	Jul 18, 2019
BLUE SAWDUST	BKKH19008027S1	Jul 18, 2019
Phthalate content		
LIGHT GREEN SAWDUST	BKKH19008027S1	Jul 18, 2019
YELLOW SAWDUST	BKKH19008027S1	Jul 18, 2019
RED SAWDUST	BKKH19008027S1	Jul 18, 2019
BLUE SAWDUST	BKKH19008027S1	Jul 18, 2019



The report shall not be reproduced without written approval from Intertek

The results relate only to the item tested.



Test conducted:

1 Physical And Mechanical Tests

Test Standard: ASTM Standard Consumer Safety Specification for Toy Safety F963-17.

Age gropu for testing : For age over 2 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
 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

<u>Clause</u>	<u>Testing items</u>	<u>Assessment</u>
4.1	Material quality	Р
4.5	Sound-producing toys	NA
4.6.1	Toys intended for children under 36 months (small objects)	Р
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	Р
4.8	Projections	NA
4.9	Accessible points	Р
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(4.20.1) Pacifiers	NA
4.21	Projectile toys	NA
4.22	Teethers and teething toys	NA



The report shall not be reproduced without written approval from Intertek



The results relate only to the item tested

Test conducted:

<u>Clause</u>	<u>Testing items</u>	<u>Assessment</u>
4.23	Rattles	NA
4.24	Squeeze toys	NA
4.25 (4.25.10, 4.25.11 [▲])	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	Р
6	Instructional literature	Р
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: May 22, 2020 to July 16, 2020

Page 5 of 12



The report shall not be reproduced without written approval from Intertek



The results relate only to the item tested.

Test conducted:

2 Flammability Test

Test Standard: Clause 4.2 of the ASTM Standard Consumer Safety Specification for Toy Safety F963-17.

Results: Did not ignite

Testing period: May 22, 2020 to July 16, 2020





The report shall not be reproduced without written approval from Intertek



The results relate only to the item tested

Test conducted:

3 Heavy Elements Analysis

As per clause 4.3.5.2(2)(b) of the ASTM Standard Consumer Safety Specification on Toy Safety F963-17, acid extraction method was used and heavy elements migration content were determined by ICP-OES analysis.

			Result		<u>LOD</u>	<u>LOQ</u>	Limit mg/kg
			mg/kg		mg/kg	mg/kg	
	(1)	(2)	(3)	(4)			
Sol. Barium (Ba)	91	82	<5	<5	1	5	1000
` '				-	1		
Sol. Lead (Pb)	<5	<5	<5	ND	Į	5	90
Sol. Cadmium (Cd)	ND	ND	ND	ND	1	5	75
Sol. Antimony (Sb)	ND	ND	ND	ND	2	5	60
Sol. Selenium (Se)	ND	ND	ND	ND	1	5	500
Sol. Chromium (Cr)	ND	ND	ND	ND	2	5	60
Sol. Mercury (Hg)	ND	ND	ND	ND	1	5	60
Sol. Arsenic (As)	ND	ND	ND	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:

(1) =	LIGHT GREEN SAWDUST	Refer	BKKH19008027S1
(2) =	YELLOW SAWDUST	Refer	BKKH19008027S1
(3) =	RED SAWDUST	Refer	BKKH19008027S1
(4) =	BLUE SAWDUST	Refer	BKKH19008027S1

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





The report shall not be reproduced without written approval from Intertek



The results relate only to the item tested

Test conducted:

Total Lead (Pb) Content

As per clause 4.3.5.2(2)(a) of the ASTM Standard Consumer Safety Specification on Toy Safety F963-17, 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</u>	<u>LOQ</u>	<u>Limit</u>
rested component	<u>mg/kg</u>	<u>(mg/kg)</u>	(mg/kg)	<u>(mg/kg)</u>
(1)	<13	1	13	100
(2)	<13	1	13	100
(3)	<13	1	13	100
(4)	<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:

(1) =	LIGHT GREEN SAWDUST	Refer	BKKH19008027S1
(2) =	YELLOW SAWDUST	Refer	BKKH19008027S1
(3) =	RED SAWDUST	Refer	BKKH19008027S1
(4) =	BLUE SAWDUST	Refer	BKKH19008027S1





The report shall not be reproduced without written approval from Intertek



The results relate only to the item tested

Test conducted:

4 <u>Total lead (Pb) content in substrate material- non-metal children's product</u>
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	Result	LOD	LOQ	Limit mg/kg
rested component				LITTIL HIG/Kg
	<u>mg/kg</u>	<u>mg/kg</u>	<u>mg/kg</u>	
(1)	<13	1	13	100
(2)	<13	1	13	100
(3)	<13	1	13	100
(4)	<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:

 (1) = LIGHT GREEN SAWDUST
 Refer
 BKKH19008027S1

 (2) = YELLOW SAWDUST
 Refer
 BKKH19008027S1

 (3) = RED SAWDUST
 Refer
 BKKH19008027S1

 (4) = BLUE SAWDUST
 Refer
 BKKH19008027S1



The report shall not be reproduced without written approval from Intertek



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>	(16CFR1307)	<u>NPR</u>
			<u>(%, w/w)</u>	_	(%, w/w)	(%, w/w)	Limit (%, w/w)	(%, w/w)
	(1)	(2)	(3)	(4)				
Dibutyl Phthalate (DBP)	ND	ND	ND	ND	0.0015	0.0030	0.1	0.1
Di(2-ethylhexyl) phthalate (DEHP)	ND	ND	ND	ND	0.0015	0.0030	0.1	0.1
Benzyl butyl Phthalate (BBP)	ND	ND	ND	ND	0.0015	0.0030	0.1	0.1
Di-iso-nonyl Phthalate (DINP)	ND	ND	ND	ND	0.0015	0.0090	0.1	0.1
Di-n-octyl Phthalate (DNOP)	ND	ND	ND	ND	0.0015	0.0030		
Di-iso-decyl Phthalate (DIDP)	ND	ND	ND	ND	0.0015	0.0090		
Di-isobutyl phthalate (DIBP) ▲	ND	ND	ND	ND	0.0015	0.0030	0.1	0.1
Di-n-pentyl phthalate (DPENP) ▲	ND	ND	ND	ND	0.0015	0.0030	0.1	0.1
Di-n-hexyl phthalate (DHEXP) ▲	ND	ND	ND	ND	0.0015	0.0030	0.1	0.1
Di-cyclohexyl phthalate (DCHP) ▲	ND	ND	ND	ND	0.0015	0.0030	0.1	0.1
Diisooctyl phthalate (DIOP) ▲	ND	ND	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 Percentage weight by weight %, w/w

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) =	LIGHT GREEN SAWDUST	Refer	BKKH19008027S1
(2) =	YELLOW SAWDUST	Refer	BKKH19008027S1
(3) =	RED SAWDUST	Refer	BKKH19008027S1
(4) =	BLUE SAWDUST	Refer	BKKH19008027S1



The report shall not be reproduced without written approval from Intertek

The results relate only to the item tested.



Test conducted:

6 Phthalate content test 4

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

			<u>Result</u>		<u>LOD</u> <u>LOQ</u> <u>Limit</u>
			(%, w/w)	<u> </u>	(%, w/w) (%, w/w) (%, w/w)
	(1)	(2)	(3)	(4)	
Dibutyl Phthalate (DBP)	ND	ND	ND	ND	0.0015 0.0030 0.1
Di(2-ethylhexyl) phthalate (DEHP)	ND	ND	ND	ND	0.0015 0.0030 0.1
Benzyl butyl Phthalate (BBP)	ND	ND	ND	ND	0.0015 0.0030 0.1
Di-iso-nonyl Phthalate (DINP)	ND	ND	ND	ND	0.0015 0.0090 0.1
Dioctyl Phthalate (DNOP)	ND	ND	ND	ND	0.0015 0.0030 0.1
Di-iso-decyl Phthalate (DIDP)	ND	ND	ND	ND	0.0015 0.0090 0.1
Di-n-hexyl Phthalate (DnHP)	ND	ND	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) =	LIGHT GREEN SAWDUST		Refer	BKKH19008027S1
(2) =	YELLOW SAWDUST		Refer	BKKH19008027S1
(3) =	RED SAWDUST		Refer	BKKH19008027S1
(4) =	BLUE SAWDUST		Refer	BKKH19008027S1





The report shall not be reproduced without written approval from Intertek



The results relate only to the item tested

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.

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> <u>mg/kg</u>	mg/kg
(1)	<13	1 13	100
(2)	<13	1 13	100
(3)	<13	1 13	100
(4)	<13	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)

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)	=	LIGHT GREEN SAWDUST	Refer	BKKH19008027S1
(2)	=	YELLOW SAWDUST	Refer	BKKH19008027S1
(3)	=	RED SAWDUST	Refer	BKKH19008027S1
(4)	=	BLUE SAWDUST	Refer	BKKH19008027S1

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

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.

Page 12 of 12

