

TEST REPORT

Number: BKKH15004481

May 18, 2015

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 SHAPE MATCHING

Item Name: SHAPE MATCHING

Item Number: 5647

Date Sample Received: April 03, 2015
Date Information Resubmitted: May 15, 2015



Test conducted:

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

To be continued

Date:

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

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



TEST REPORT

Number: BKKH15004481

Conclusion:
Tested samples Standard - U.S. ASTM F963-11

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)

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TEST REPORT

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	DI/// 14 4000 40 700	0 + 0 + 0 0 + 4
5020038 LAQUER WATER BASE	BKKH14006467S2	Oct 31, 2014
5029040 LAQUER WATER BASE+ORANGE	BKKH14015067	Nov 24, 2014
5020032 WATER BASE BLUE	BKKH14015295	Nov 25, 2014
5020030 Water Base Yellow	BKKH14015221	Dec 01, 2014
5029074 Water Base Blue	BKKH14015603	Dec 09, 2014
5029034 Water Base Green	BKKH14016086	Dec 18, 2014
5020031 WATER BASE GREEN	BKKH15005453	May 06, 2015
5020033 WATER BASE ORANGE	BKKH15005454	May 06, 2015
5020035 WATER BASE YELLOW	BKKH15005454	May 06, 2015
SOLID WOOD	BKKH14014940	Nov 20, 2014
5023002 WHITE 5%	BKKH15005181	Apr 24, 2015
Lead in surface coating	DI/// 14 4000 40 700	0 + 0 + 0 0 + 4
5020038 LAQUER WATER BASE	BKKH14006467S2	Oct 31, 2014
5029040 LAQUER WATER BASE+ORANGE	BKKH14015067	Nov 24, 2014
5020032 WATER BASE BLUE	BKKH14015295	Nov 25, 2014
5020030 Water Base Yellow	BKKH14015221	Dec 01, 2014
5029074 Water Base Blue	BKKH14015603	Dec 09, 2014
5029034 Water Base Green	BKKH14016086	Dec 18, 2014
5020031 WATER BASE GREEN	BKKH15005453	May 06, 2015
5020033 WATER BASE ORANGE	BKKH15005454	May 06, 2015
5020035 WATER BASE YELLOW	BKKH15005454	May 06, 2015
Lead in substrate		
SOLID WOOD	BKKH14014940	Nov 20, 2014
5023002 WHITE 5%	BKKH15005181	Apr 24, 2015
Phthalate content		
5020038 LACQUER WATER BASE	BKKH15003996	Mar 26, 2015
5029040 WATER BASE ORANGE	BKKH15003889	Mar 24, 2015
5029074 WATER BASE BLUE	BKKH15003889	Mar 24, 2015
5020032 Water Base Blue	BKKH15005186	Apr 24, 2015
5023002 WHITE 5%	BKKH15005181	Apr 24, 2015
5020031 WATER BASE GREEN	BKKH15005453	May 06, 2015
5020033 WATER BASE ORANGE	BKKH15005454	May 06, 2015
5020035 WATER BASE YELLOW	BKKH15005454	May 06, 2015
5029034 WATER BASE GREEN	BKKH15005452	May 06, 2015
5020030 Water Base Yellow	BKKH15005764	May 14, 2015

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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 over 3 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 1500.53(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

<u>Section</u>	<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)	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	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

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TEST REPORT

Test conducted:

Section	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
5	Labelling requirement	Р
6	Instructional literature	Р
7	Producer's markings	
	- name of producer (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: April 03, 2015 to April 16, 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: April 03, 2015 to April 16, 2015

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The results relate only to the item tested.

TEST REPORT

Test conducted:

3 Heavy Elements Analysis

As per Section 4.3.5.1(2) and 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 mg/kg			<u>LOD</u> mg/kg	<u>LOQ</u> mg/kg	<u>Limit</u> mg/kg
	(1)	(2)	(3)	(4)	(5)			
Sol. Barium (Ba)	< 4	ND	< 4	< 4	< 4	0.7	4	1000
Sol. Lead (Pb)	< 4	ND	ND	ND	ND	0.7	4	90
Sol. Cadmium (Cd)	< 4	ND	ND	ND	ND	0.7	4	75
Sol. Antimony (Sb)	< 2	ND	ND	ND	ND	0.8	2	60
Sol. Selenium (Se)	< 2	ND	ND	ND	ND	0.4	2	500
Sol. Chromium (Cr)	< 4	ND	ND	ND	ND	0.7	4	60
Sol. Mercury (Hg)	< 3	ND	ND	ND	ND	1	3	60
Sol. Arsenic (As)	< 1	ND	ND	ND	ND	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) =	5020038	LAQUER WATER BASE	Refer	BKKH14006467S2
(2) =	5029040	LAQUER WATER BASE+ORANGE	Refer	BKKH14015067
(3) =	5020032	WATER BASE BLUE	Refer	BKKH14015295
(4) =	5020030	Water Base Yellow	Refer	BKKH14015221
(5) =	5029074	Water Base Blue	Refer	BKKH14015603

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 Section 4.3.5.1(2) and 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 mg/kg		<u>LOD</u> mg/kg	<u>LOQ</u> mg/kg	<u>Limit</u> mg/kg
	(6)	(7)	(8)	(9)			
Sol. Barium (Ba)	4	ND	5	ND	0.7	4	1000
Sol. Lead (Pb)	ND	ND	ND	ND	0.7	4	90
Sol. Cadmium (Cd)	ND	ND	ND	ND	0.7	4	75
Sol. Antimony (Sb)	ND	ND	ND	ND	8.0	2	60
Sol. Selenium (Se)	ND	ND	ND	ND	0.4	2	500
Sol. Chromium (Cr)	ND	ND	ND	ND	0.7	4	60
Sol. Mercury (Hg)	ND	ND	ND	ND	1	3	60
Sol. Arsenic (As)	ND	ND	ND	ND	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:

(6) =	5029034	Water Base Green	Refer	BKKH14016086
(7) =	5020031	WATER BASE GREEN	Refer	BKKH15005453
(8) =	5020033	WATER BASE ORANGE	Refer	BKKH15005454
(9) =	5020035	WATER BASE YELLOW	Refer	BKKH15005454

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 Section 4.3.5.1(2) and 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 mg/kg	<u>LOD</u> mg/kg	<u>LOQ</u> mg/kg	<u>Limit</u> mg/kg
	(10)	(11)	<u>mg/kg</u>	<u>mg/kg</u>	mg/kg	<u>mg/kg</u>
Sol. Barium (Ba)	< 4	ND		0.7	4	1000
Sol. Lead (Pb)	ND	ND		0.7	4	90
Sol. Cadmium (Cd)	ND	ND		0.7	4	75
Sol. Antimony (Sb)	ND	ND		8.0	2	60
Sol. Selenium (Se)	ND	ND		0.4	2	500
Sol. Chromium (Cr)	ND	ND		0.7	4	60
Sol. Mercury (Hg)	ND	ND		1	3	60
Sol. Arsenic (As)	ND	ND		0.8	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:

(10) =	•	SOLID WOOD	Refer	BKKH14014940
(11) =	5023002	WHITE 5%	Refer	BKKH15005181

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 Sections 4.3.5.1(1) and 4.3.5.2(2)(a) of the ASTM Standard Consumer Safety Specification on Toy Safety F963-11, test method CPSC-CH-E1003-09.1 was used and total Lead content was determined by ICP-OES analysis.

(I) 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>	<u>(mg/kg)</u>	<u>(mg/kg)</u>
(1)	< 10	2	13	90
(2)	ND	2	13	90
(3)	ND	2	13	90
(4)	< 13	2	13	90
(5)	ND	2	13	90
(6)	ND	2	13	90
(7)	ND	2	13	90
(8)	ND	2	13	90
(9)	ND	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)

Tested components:

(1)	=	5020038	LAQUER WATER BASE	Refer	BKKH14006467S2
(2)	=	5029040	LAQUER WATER BASE+ORANGE	Refer	BKKH14015067
(3)	=	5020032	WATER BASE BLUE	Refer	BKKH14015295
(4)	=	5020030	Water Base Yellow	Refer	BKKH14015221
(5)	=	5029074	Water Base Blue	Refer	BKKH14015603
(6)	=	5029034	Water Base Green	Refer	BKKH14016086
(7)	=	5020031	WATER BASE GREEN	Refer	BKKH15005453
(8)	=	5020033	WATER BASE ORANGE	Refer	BKKH15005454
(9)	=	5020035	WATER BASE YELLOW	Refer	BKKH15005454
	****	******	****************************	******	******

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Attention is drawn to the Terms and Conditions printed overleaf.



TEST REPORT

Test conducted:

Total Lead (Pb) Content

As per Sections 4.3.5.1(1) and 4.3.5.2(2)(a) of the ASTM Standard Consumer Safety Specification on Toy Safety F963-11, test method CPSC-CH-E1001-08.3, CPSC-CH-E1002-08.3 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>
rested Component	<u>mg/kg</u>	<u>(mg/kg)</u> (mg/kg)	<u>(mg/kg)</u>
(10)	< 13	1 13	100
(11)	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:

 (10) =
 SOLID WOOD
 Refer
 BKKH14014940

 (11) =
 5023002
 WHITE 5%
 Refer
 BKKH15005181

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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
(2)	ND	0.0002	0.0013	0.009
(3)	ND	0.0002	0.0013	0.009
(4)	< 0.0013	0.0002	0.0013	0.009
(5)	ND	0.0002	0.0013	0.009
(6)	ND	0.0002	0.0013	0.009
(7)	ND	0.0002	0.0013	0.009
(8)	ND	0.0002	0.0013	0.009
(9)	ND	0.0002	0.0013	0.009

Remark: % = percentage

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

ND = Not detected (Less than LOD)

Tested components:

(1)	=	5020038	LAQUER WATER BASE	Refer	BKKH14006467S2
(2)	=	5029040	LAQUER WATER BASE+ORANGE	Refer	BKKH14015067
(3)	=	5020032	WATER BASE BLUE	Refer	BKKH14015295
(4)	=	5020030	Water Base Yellow	Refer	BKKH14015221
(5)	=	5029074	Water Base Blue	Refer	BKKH14015603
(6)	=	5029034	Water Base Green	Refer	BKKH14016086
(7)	=	5020031	WATER BASE GREEN	Refer	BKKH15005453
(8)	=	5020033	WATER BASE ORANGE	Refer	BKKH15005454
(9)	=	5020035	WATER BASE YELLOW	Refer	BKKH15005454
	****	******	**************************	******	******

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TEST REPORT

Test conducted:

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	<u>Result</u>	<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
(2)	ND	2	13	90
(3)	ND	2	13	90
(4)	< 13	2	13	90
(5)	ND	2	13	90
(6)	ND	2	13	90
(7)	ND	2	13	90
(8)	ND	2	13	90
(9)	ND	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)

Tested components:

(1)	=	5020038	LAQUER WATER BASE	Refer	BKKH14006467S2
(2)	=	5029040	LAQUER WATER BASE+ORANGE	Refer	BKKH14015067
(3)	=	5020032	WATER BASE BLUE	Refer	BKKH14015295
(4)	=	5020030	Water Base Yellow	Refer	BKKH14015221
(5)	=	5029074	Water Base Blue	Refer	BKKH14015603
(6)	=	5029034	Water Base Green	Refer	BKKH14016086
(7)	=	5020031	WATER BASE GREEN	Refer	BKKH15005453
(8)	=	5020033	WATER BASE ORANGE	Refer	BKKH15005454
(9)	=	5020035	WATER BASE YELLOW	Refer	BKKH15005454
	****	******	*************************	*****	******

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TEST REPORT

Test conducted:

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	<u>Result</u>	<u>LOD</u>	<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)	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)

Tested components:

(1) = SOLID WOOD Refer BKKH14014940 (2) = 5023002 WHITE 5% Refer BKKH15005181

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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.

			Result			<u>LOD</u>	<u>LOQ</u>	<u>Limit</u>	NPR
				(%, w/w)(%, w/w) <u>(%, w/w)</u>			(%, w/w)		
	(1)	(2)	(3)	(4)	(5)				
Dibutyl Phthalate (DBP)	ND	ND	ND	ND	ND	0.0015	0.003	0.1	0.1
Diethyl hexyl Phthalate (DEHP)	ND	ND	ND	ND	ND	0.0015	0.003	0.1	0.1
Benzyl butyl Phthalate (BBP)	ND	ND	ND	ND	ND	0.0015	0.003	0.1	0.1
Di-iso-nonyl Phthalate (DINP)	ND	ND	ND	ND	ND	0.0015	0.009	0.1	0.1
Di-n-octyl Phthalate (DNOP)	ND	ND	ND	ND	ND	0.0015	0.003	0.1	
Di-iso-decyl Phthalate (DIDP)	ND	ND	ND	ND	ND	0.0015	0.009	0.1	
Di-isobutyl phthalate (DIBP)	ND	ND	ND	ND	ND	0.0015	0.009		0.1
Di-n-pentyl phthalate (DnPP)	ND	ND	ND	ND	ND	0.0015	0.009		0.1
Di-n-hexyl phthalate (DnHP)	ND	ND	ND	ND	ND	0.0015	0.009		0.1
Di-cyclohexyl phthalate (DCHP)	ND	ND	ND	ND	ND	0.0015	0.009		0.1
Diisooctyl phthalate (DIOP)	ND	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

< = Less

LOD = Limit of Detection LOQ = Limit of Quantitation

ND = Not detected (Less than LOD)

Tested components:

(1) =	5020038	LACQUER WATER BASE	Refer	BKKH15003996
(2) =	5029040	WATER BASE ORANGE	Refer	BKKH15003889
(3) =	5029074	WATER BASE BLUE	Refer	BKKH15003889
(4) =	5020032	Water Base Blue	Refer	BKKH15005186
(5) =	5023002	WHITE 5%	Refer	BKKH15005181
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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:

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.

			Result			<u>LOD</u>	<u>LOQ</u>	<u>Limit</u>	NPR
			(%, w/w) (%, w/w) <u>(%, w/w)</u>			(%, w/w)			
	(6)	(7)	(8)	(9)	(10)				
Dibutyl Phthalate (DBP)	ND	ND	ND	ND	ND	0.0015	0.003	0.1	0.1
Diethyl hexyl Phthalate (DEHP)	ND	0.0037	ND	ND	ND	0.0015	0.003	0.1	0.1
Benzyl butyl Phthalate (BBP)	ND	ND	ND	ND	ND	0.0015	0.003	0.1	0.1
Di-iso-nonyl Phthalate (DINP)	ND	ND	ND	ND	ND	0.0015	0.009	0.1	0.1
Di-n-octyl Phthalate (DNOP)	ND	ND	ND	ND	ND	0.0015	0.003	0.1	
Di-iso-decyl Phthalate (DIDP)	ND	ND	ND	ND	ND	0.0015	0.009	0.1	
Di-isobutyl phthalate (DIBP)	ND	ND	ND	ND	ND	0.0015	0.009		0.1
Di-n-pentyl phthalate (DnPP)	ND	ND	ND	ND	ND	0.0015	0.009		0.1
Di-n-hexyl phthalate (DnHP)	ND	ND	ND	ND	ND	0.0015	0.009		0.1
Di-cyclohexyl phthalate (DCHP)	ND	ND	ND	ND	ND	0.0015	0.009		0.1
Diisooctyl phthalate (DIOP)	ND	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

ND = Not detected (Less than LOD)

Tested components:

(6) =	5020031	WATER BASE GREEN	Refer	BKKH15005453
(7) =	5020033	WATER BASE ORANGE	Refer	BKKH15005454
(8) =	5020035	WATER BASE YELLOW	Refer	BKKH15005454
(9) =	5029034	WATER BASE GREEN	Refer	BKKH15005452
(10) =	5020030	Water Base Yellow	Refer	BKKH15005764
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E-mail Address: tfh.thailand@intertek.com



TEST REPORT

Test conducted:

8 Phthalate content test

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

			Result	LOD	<u>LOQ</u>	<u>Limit</u>		
		<u>(%, w/w)</u>					(%, w/w)	(%, w/w)
	(1)	(2)	(3)	(4)	(5)			
Dibutyl Phthalate (DBP)	ND	ND	ND	ND	ND	0.0015	0.003	0.1
Diethyl hexyl Phthalate (DEHP)	ND	ND	ND	ND	ND	0.0015	0.003	0.1
Benzyl butyl Phthalate (BBP)	ND	ND	ND	ND	ND	0.0015	0.003	0.1
Di-iso-nonyl Phthalate (DINP)	ND	ND	ND	ND	ND	0.0015	0.009	0.1
Dioctyl Phthalate (DNOP)	ND	ND	ND	ND	ND	0.0015	0.003	0.1
Di-iso-decyl Phthalate (DIDP)	ND	ND	ND	ND	ND	0.0015	0.009	0.1
Di-n-hexyl Phthalate (DnHP)	ND	ND	ND	ND	ND	0.0015	0.003	0.1

Remark: < = Less than

LOD = Limit of Detection LOQ = Limit of Quantitation

ND = Not detected (Less than LOD)

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

Tested components:

(1)	= 5020038	LACQUER WATER BASE	Refer	BKKH15003996
(2)	= 5029040	WATER BASE ORANGE	Refer	BKKH15003889
(3)	= 5029074	WATER BASE BLUE	Refer	BKKH15003889
(4)	= 5020032	Water Base Blue	Refer	BKKH15005186
(5)	= 5023002	WHITE 5%	Refer	BKKH15005181
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TEST REPORT

Test conducted:

Phthalate content test

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

			Result		LOD	LOQ	<u>Limit</u>	
		<u>(%, w/w)</u>					(%, w/w)	(%, w/w)
	(6)	(7)						
Dibutyl Phthalate (DBP)	ND	ND	ND	ND	ND	0.0015	0.003	0.1
Diethyl hexyl Phthalate (DEHP)	ND	0.0037	ND	ND	ND	0.0015	0.003	0.1
Benzyl butyl Phthalate (BBP)	ND	ND	ND	ND	ND	0.0015	0.003	0.1
Di-iso-nonyl Phthalate (DINP)	ND	ND	ND	ND	ND	0.0015	0.009	0.1
Dioctyl Phthalate (DNOP)	ND	ND	ND	ND	ND	0.0015	0.003	0.1
Di-iso-decyl Phthalate (DIDP)	ND	ND	ND	ND	ND	0.0015	0.009	0.1
Di-n-hexyl Phthalate (DnHP)	ND	ND	ND	ND	ND	0.0015	0.003	0.1

Remark: < = Less than

LOD = Limit of Detection LOQ = Limit of Quantitation

ND = Not detected (Less than LOD)

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

Tested components:

(6) =	5020031	WATER BASE GREEN	Refer	BKKH15005453
(7) =	5020033	WATER BASE ORANGE	Refer	BKKH15005454
(8) =	5020035	WATER BASE YELLOW	Refer	BKKH15005454
(9) =	5029034	WATER BASE GREEN	Refer	BKKH15005452
(10) =	5020030	Water Base Yellow	Refer	BKKH15005764

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



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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.

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
(2)	ND	2	13	90
(3)	ND	2	13	90
(4)	< 13	2	13	90
(5)	ND	2	13	90
(6)	ND	2	13	90
(7)	ND	2	13	90
(8)	ND	2	13	90
(9)	ND	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)	=	5020038	LAQUER WATER BASE	Refer	BKKH14006467S2
(2)	=	5029040	LAQUER WATER BASE+ORANGE	Refer	BKKH14015067
(3)	=	5020032	WATER BASE BLUE	Refer	BKKH14015295
(4)	=	5020030	Water Base Yellow	Refer	BKKH14015221
(5)	=	5029074	Water Base Blue	Refer	BKKH14015603
(6)	=	5029034	Water Base Green	Refer	BKKH14016086
(7)	=	5020031	WATER BASE GREEN	Refer	BKKH15005453
(8)	=	5020033	WATER BASE ORANGE	Refer	BKKH15005454
(9)	=	5020035	WATER BASE YELLOW	Refer	BKKH15005454

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TEST REPORT

Test conducted:

Non-surface coating material (substrate)

Tested component	Result	LOD	<u>LOQ</u>	<u>Limit</u>
	<u>mg/kg</u>	mg/kg	mg/kg	<u>mg/kg</u>
(10)	< 13	1	13	100
(11)	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:

(10) = SOLID WOOD (11) = 5023002 WHITE 5% Refer BKKH14014940

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

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