

## TEST REPORT

Number: BKKH11065151

Applicant: NARA FACTORY CO., LTD.  
426 ANAMAI NGAMCHAROEN RD.,  
THAKHAM, BANGKHOONTIEN,  
BANGKOK 10150 THAILAND  
ATTN: K.TAN

Date: Jul 25, 2011

### Sample Description:

One (1) set of submitted sample said to be Plastic components, Playmats, Plastic boxes

Item name:	Plastic components, Playmats, Plastic boxes
Country of origin:	Thailand
Date sample received:	July 12, 2011
Date sample resubmitted:	July 18, 2011



BKKH11065151

### Tests conducted:

As requested by the applicant, for details please refer to attached pages.

Authorized by :  
For Intertek Testing Services (Thailand)

*Phanit H.*

Phanit Hitapong  
Division Manager  
Toys & Hardlines Division



The report shall not be reproduced without written approval from Intertek  
Attention is drawn to the Terms and Conditions for Inspection printed overleaf.

## TEST REPORT

Number: BKKH11065151

### Conclusion:

<u>Tested samples</u>	<u>Standard</u>	<u>Result</u>
Submitted sample set	EN71 Part 3 : 1994 with the Incorporation of amendment A1:2000 and AC:2002	Pass
	Cadmium Content Requirement in Annex XVII item 23 of the REACH Regulation (EC) No. 1907/2006 (formerly known as directive 91/338/eec)	Pass
	Phthalates content Requirement in Annex XVII items 51 & 52 of the REACH regulation (EC) No. 1907/2006 (Formerly known as directive 2005/84/EC)	Pass

Note: According to the standard EN71-3, individual testing should be performed, however, as request by the applicant, mix testing has been conducted on the submitted samples.

\*\*\*\*\*

## TEST REPORT

Number: BKKH11065151

Test conducted:

### 1 Toxic elements analysis

As per European Standard on safety of toys EN71 Part 3 : 1994 with the incorporation of amendment A1 : 2000 and AC : 2002, toxic elements migration were determined by Inductively Couple Plasma Optical Emission Spectrometry.

	<u>Result in mg/kg</u>									<u>Limit in mg/kg</u>
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
Sol. Barium (Ba)	<5	<5	<5	<5	<5	<5	<5	<5	<5	1000
Sol. Lead (Pb)	<5	<5	<5	<5	<5	<5	<5	<5	<5	90
Sol. Cadmium (Cd)	<5	<5	<5	<5	<5	<5	<5	<5	<5	75
Sol. Antimony (Sb)	<5	<5	<5	<5	<5	<5	<5	<5	<5	60
Sol. Selenium (Se)	<5	<5	<5	<5	<5	<5	<5	<5	<5	500
Sol. Chromium (Cr)	<5	<5	<5	<5	<5	<5	<5	<5	<5	60
Sol. Mercury (Hg)	<5	<5	<5	<5	<5	<5	<5	<5	<5	60
Sol. Arsenic (As)	<3	<3	<3	<3	<3	<3	<3	<3	<3	25

Remark: Sol. = Soluble

< = Less than

mg/kg = milligram per kilogram based on weight of sample

Test components:

(1) = Green/Dk.Green/Pink plastic mold

(2) = Red/Navy/Blue plastic mold

(3) = Orange/Yellow/Black plastic mold

(4) = Translucent white/Blue/Red plastic (Square & Round box)

(5) = White/Black/Blue plastic (lid)

(6) = Green/Orange/Pink plastic (lid)

(7) = Navy/Violet/Yellow plastic (lid)

(8) = Red plastic (lid)/Lt.Blue plastic (round box)/Magenta plastic lid

(9) = Plastic playmat with multicolor printed (2 styles)

Testing period: July18, 2011 to July 25, 2011

\*\*\*\*\*



The report shall not be reproduced without written approval from Intertek  
Attention is drawn to the Terms and Conditions for Inspection printed overleaf.

## TEST REPORT

Number: BKKH11065151

Test conducted:

### 2 Total Cadmium (Cd) Content

As per Cadmium content requirement in Annex XVII item 23 of the REACH regulation (EC) No. 1907/2006 (Formerly known as directive 91/338/EEC), acid digestion method was used and total Cadmium content was determined by Inductively Couple Plasma Optical Emission Spectrometry.

<u>Tested samples</u>	<u>Result in %</u>	<u>Limit in %</u>
(1)	<0.001	0.01
(2)	<0.001	0.01
(3)	0.001	0.01
(4)	<0.001	0.01
(5)	<0.001	0.01
(6)	<0.001	0.01
(7)	<0.001	0.01
(8)	<0.001	0.01
(9)	<0.001	0.01

Remark : % = Percentage based on weight of sample;  
< = Less than

Test components:

- (1) = Green/Dk.Green/Pink plastic mold
- (2) = Red/Navy/Blue plastic mold
- (3) = Orange/Yellow/Black plastic mold
- (4) = Translucent white/Blue/Red plastic (Square & Round box)
- (5) = White/Black/Blue plastic (lid)
- (6) = Green/Orange/Pink plastic (lid)
- (7) = Navy/Violet/Yellow plastic (lid)
- (8) = Red plastic (lid)/Lt.Blue plastic (round box)/Magenta plastic lid
- (9) = Plastic playmat with multicolor printed (2 styles)

Testing period: July 18, 2011 to July 25, 2011

\*\*\*\*\*

## TEST REPORT

Number: BKKH11065151

Test conducted:

### 3 Phthalate content test

With reference to EN 14372, by Gas Chromatographic-Mass Spectrometric (GC-MS) Analysis.

#### (I) for all toys and childcare articles

	<u>Result</u> (%, w/w)					<u>Limit</u> (%, w/w)
	(1)	(2)	(3)	(4)	(5)	
Dibutyl Phthalate (DBP)	<0.01	<0.01	<0.01	<0.01	<0.01	-
Diethyl hexyl Phthalate (DEHP)	<0.01	<0.01	<0.01	<0.01	<0.01	-
Benzyl butyl Phthalate (BBP)	<0.01	<0.01	<0.01	<0.01	<0.01	-
Sum of three phthalates :	<0.01	<0.01	<0.01	<0.01	<0.01	0.1

#### (II) for all toys and childcare articles that can be placed in the mouth

	<u>Result</u> (%, w/w)					<u>Limit</u> (%, w/w)
	(1)	(2)	(3)	(4)	(5)	
Di-iso-nonyl Phthalate (DINP)	<0.01	<0.01	<0.01	<0.01	<0.01	-
Di-n-octyl Phthalate (DNOP)	<0.01	<0.01	<0.01	<0.01	<0.01	-
Di-iso-decyl Phthalate (DIDP)	<0.01	<0.01	<0.01	<0.01	<0.01	-
Sum of three phthalates :	<0.01	<0.01	<0.01	<0.01	<0.01	0.1

Remark: < = Less than

The above limit was quoted according to Annex XVII items 51 & 52 of the REACH regulation (EC) No. 1907/2006 (formerly known as directive 2005/84/ec) for phthalate content in toys and children articles.

Detection limit = 0.01% (w/w)

Test components:

- (1) = Green/Dk.Green/Pink plastic mold
- (2) = Red/Navy/Blue plastic mold
- (3) = Orange/Yellow/Black plastic mold
- (4) = Translucent white/Blue/Red plastic (Square & Round box)
- (5) = White/Black/Blue plastic (lid)

Testing period: July 18, 2011 to July 25, 2011

\*\*\*\*\*



The report shall not be reproduced without written approval from Intertek  
Attention is drawn to the Terms and Conditions for Inspection printed overleaf.

## TEST REPORT

Number: BKKH11065151

Test conducted:

### 3 Phthalate content test

With reference to EN 14372, by Gas Chromatographic-Mass Spectrometric (GC-MS) Analysis.

#### (I) for all toys and childcare articles

	<u>Result</u> (%, w/w)				<u>Limit</u> (%, w/w)
	(6)	(7)	(8)	(9)	
Dibutyl Phthalate (DBP)	<0.01	<0.01	<0.01	<0.01	-
Diethyl hexyl Phthalate (DEHP)	<0.01	<0.01	<0.01	<0.01	-
Benzyl butyl Phthalate (BBP)	<0.01	<0.01	<0.01	<0.01	-
Sum of three phthalates :	<0.01	<0.01	<0.01	<0.01	0.1

#### (II) for all toys and childcare articles that can be placed in the mouth

	<u>Result</u> (%, w/w)				<u>Limit</u> (%, w/w)
	(6)	(7)	(8)	(9)	
Di-iso-nonyl Phthalate (DINP)	<0.01	<0.01	<0.01	<0.01	-
Di-n-octyl Phthalate (DNOP)	<0.01	<0.01	<0.01	<0.01	-
Di-iso-decyl Phthalate (DIDP)	<0.01	<0.01	<0.01	<0.01	-
Sum of three phthalates :	<0.01	<0.01	<0.01	<0.01	0.1

Remark: < = Less than

The above limit was quoted according to Annex XVII items 51 & 52 of the REACH regulation (EC) No. 1907/2006 (formerly known as directive 2005/84/ec) for phthalate content in toys and children articles.

Detection limit = 0.01% (w/w)

Test components:

- (6) = Green/Orange/Pink plastic (lid)
- (7) = Navy/Violet/Yellow plastic (lid)
- (8) = Red plastic (lid)/Lt.Blue plastic (round box)/Magenta plastic lid
- (9) = Plastic playmat with multicolor printed (2 styles)

Testing period: July 18, 2011 to July 25, 2011

\*\*\*\*\* E N D \*\*\*\*\*/DE/PH/OL