



**BUREAU  
VERITAS**

CONSUMER PRODUCTS SERVICES DIVISION

**Technical Report: (8516)137-0688(A)(Revision)**  
Date Received: June 03, 2016

June 14, 2016  
Page 1 of 7

NOBUKO SARL  
5 RUE TRONFOU 01700 ST  
MAURICE DE BEYNOST  
FRANCE

Sample Description:	TOYS(PUZZLE MAT) 1.) FROZEN 2.) CARS 3.) DORY 4.) PAW PATROL	Sample Size:	4
Vendor:	GUANG DONG FAIRNESS ENTERPRISE CO LTD	(*Style No(s):	TPP11D.2,TC11D, TFR11D.2,TD11D
Manufacturer:	GUANG DONG FAIRNESS ENTERPRISE CO LTD	SKN/SKU No.:	N/A
Buyer:	NOBUKO SARL	PO No.:	N/A
Labeled Age Grade:	N/A	Ref #:	N/A
Appropriate Age Grade:	N/A	Country of Origin:	CHINA
Client Specified Age Grade:	N/A	Assortment No.:	N/A
Tested Age Grade:	OVER 10 MONTHS OF AGE		
UPC Code:	N/A		

#### **EXECUTIVE SUMMARY:**

The sample(s) MEET the following requirement(s):

- The cadmium content requirement of the European Regulation (EC) No. 1907/2006 of the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), Annex XVII concerning the Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles, Item no. 23 (amended up to EU No. 2016/217).
- The polycyclic aromatic hydrocarbons (PAHs) content requirement of European Regulation (EC) No. 1907/2006 REACH Annex XVII, Item no. 50, Paragraph 5 and 6.
- The formamide content requirement of the French Arrêté du 26 Octobre 2015 Portant Suspension de la Mise sur le Marché de Jouets en Mousse « Tapis-Puzzles » Contenant du Formamide (Order of 26 October 2015 suspending the placing on the market of foam toys "puzzle mats" containing formamide).
- The Bisphenol A content requirement of the European Council Directive 2009/48/EC (and its amendments), Annex II, Appendix C.
- The BBP, DBP and DEHP content requirements of the European Regulation (EC) No. 1907/2006 of the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), Annex XVII concerning the Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles, Item no. 51.



GUANG DONG FAIRNESS ENTERPRISE CO LTD  
Technical Report: **(8516)137-0688(A)(Revision)**  
June 14, 2016  
Page 2 of 7

**EXECUTIVE SUMMARY:**

The sample(s) MEET the following requirement(s):

- The DNOP, DINP and DIDP content requirements of the European Regulation (EC) No. 1907/2006 of the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), Annex XVII concerning the Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles, Item no. 52.
- The TCEP, TDCPP and TCPP content requirement of the European Council Directive 2009/48/EC (and its amendments), Annex II, Appendix C.

BUREAU VERITAS SHENZHEN CO.,LTD

Choy Hon Kwong, Adams  
Senior Manager  
Analytical Department

AC/jq

*This report shall not be reproduced except in full, without the written approval of our laboratory.*



**RESULTS:**

**FORMAMIDE CONTENT (French Arrêté du 26 Octobre 2015 Portant Suspension de la Mise sur le Marché de Jouets en Mousse « Tapis-Puzzles » Contenant du Formamide)**

Analyte			Formamide	
Requirement: Maximum allowable limit:			200 mg/kg	
Sample Description			Result (mg/kg)	Conclusion
	Color / Component	Location	Style	
(A)	Multicolor printed white foam	Puzzle mat	1-4	144 PASS

LT = Less Than

\* = Average of duplicate analyses

mg/kg = milligram per kilogram (ppm = part per million)

**BISPHENOL A (MIGRATION) CONTENT (2009/48/EC(and its amendments) Annex II, Appendix C)**

Parameter:			Bisphenol A		
Maximum allowable limit:			0.1 mg/L		
	Color / Component	Location	Style	Result (µg/mL)	Conclusion
A.	Multicolor printed white foam	Puzzle mat	1-4	LT 0.1	PASS

LT = Less than

mg/L = milligram per liter of simulant



**RESULTS:**

**BBP/DBP/DEHP CONTENTS IN TOYS AND CHILDCARE ARTICLES (European Regulation (EC) No. 1907/2006 REACH Annex XVII, Item no. 51)**

Test Method: Sample was extracted with organic solvent and then analyzed by Liquid Chromatograph Mass Spectrometer / Gas Chromatograph Mass Spectrometer.

Sample Identity	Test Component	Location	Style
A.	Multicolor printed white foam	Puzzle mat	1-4

Test Parameter:	BBP	DBP	DEHP	Sum of three phthalates	
Limit (%):	0.1	0.1	0.1	0.1	
Sample	Result (%)				Conclusion
A.	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS

*Detection Limit :*

*BBP = Butyl benzyl phthalate (0.005%)*

*DBP = Dibutyl phthalate (0.005%)*

*DEHP = Di(2-ethylhexyl) phthalate (0.005%)*

*Results reported in percentage*

*LT = Less than*

*ND = None detected*

**DNOP/DINP/DIDP CONTENTS IN TOYS AND CHILDCARE ARTICLES WHICH CAN BE PLACED IN MOUTH BY THE CHILDREN (European Regulation (EC) No. 1907/2006 REACH Annex XVII, Item no. 52)**

Test Method: Sample was extracted with organic solvent and then analyzed by Liquid Chromatograph Mass Spectrometer / Gas Chromatograph Mass Spectrometer.

Sample Identity	Test Component	Location	Style
A.	Multicolor printed white foam	Puzzle mat	1-4

Test Parameter:	DNOP	DINP	DIDP	Sum of three phthalates	
Limit (%):	0.1	0.1	0.1	0.1	
Sample	Result (%)				Conclusion
A.	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS

*Detection Limit :*

*DNOP = Di-n-octyl phthalate (0.005%)*

*DINP = Di-iso-nonyl phthalate (0.005%)*

*DIDP = Di-iso-decyl phthalate (0.005%)*

*Results reported in percentage*

*LT = Less than*

*ND = None detected*





**RESULTS:**

**TCEP/ TDCPP/ TCPP CONTENT (2009/48/EC(and its amendments) Annex II, Appendix C)**

Sample Identity	Test Component	Location	Style
A.	Multicolor printed white foam	Puzzle mat	1-4

Analyte:	TCEP	TDCPP	TCPP
Limit (mg/kg):	ND	ND	ND

Analyte	TCEP	TDCPP	TCPP	
Sample	Result (mg/kg)			Conclusion
A.	LT 5	LT 5	LT 5	PASS

*Detection Limit :*

TCEP = Tris(2-chloroethyl)phosphate (5 mg/kg)      Results reported in percentage  
 TDCPP = Tris(1,3-dichloro-2-propyl)phosphate (5 mg/kg)      LT = Less than  
 TCPP = Tris(1-chloro-2-propyl)phosphate (5 mg/kg)      ND = None detected

**CADMIUM CONTENT (European Regulation (EC) No. 1907/2006 REACH Annex XVII, Item no. 23)**

Category:				Plastics			
Element:				Cadmium			
Test Method				BS EN 1122: 2001, Method B			
Maximum Allowable Limit:				100 mg/kg (0.01% by weight)			
Sample Description				Reading 1	Reading 2	Average	Conclusion
Color / Component	Location	Style	Result (mg/kg)				
(A) Multicolor printed white foam	Puzzle mat	1-4	LT 10	LT 10	LT 10	PASS	

LT = Less than      mg/kg = milligrams per kilogram (ppm = parts per million)  
 # = Insufficient sample for duplicate analyses      Operator: Tsang Lut Wai , Philip



**BUREAU  
VERITAS**

GUANG DONG FAIRNESS ENTERPRISE CO LTD  
Technical Report: **(8516)137-0688(A)(Revision)**  
June 14, 2016  
Page 7 of 7

**RESULTS:**

