

**Test Report No. F690101/LF-CTSAYHA13-00781** Issued Date : February 15, 2013 Page 1 of 4

**TO: I&S**  
136-1, Hojuk-Ri,  
Oksanmyeon,  
Cheongwongun,  
Chungbuk,  
Korea

The following sample(s) was/were submitted and identified on behalf of the client as : -

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**SGS Job No..** : AYHA13-00781  
**Sample Description** : Dwinguler Kids' Playmat (环保康乐儿童垫)  
**Style /Item No.** : -  
**Order No.** : -  
**Manufacturer** : -  
**Country of Origin** : -  
**Country of Destination** : -  
**Sample Receiving Date** : FEB. 08, 2013  
**Testing Period** : FEB. 12, 2013 to FEB. 15, 2013  
**Test Performed** : SGS Korea tested the sample(s) selected by applicant with following result.  
**Test Requested** : As specified by client, selected parts of the submitted sample(s) with reference to Safety of Toys, EN 71-9:2005+A1:2007 – Organic Chemical Compounds – Requirements.  
1) To determine Monomers (Migration) in the submitted samples.  
2) To determine Solvents (Migration) in the submitted samples.  
3) To determine Plasticizers (Migration) in the submitted samples.  
**Test Result(s)** : For further details, please refer to following page.

SGS Korea Co., Ltd.



Jeff Jang/ Technical Manager

**Results :**

**1) Monomers migration**

Method : Sample preparation with reference to EN71-10:2005 followed by analysis with reference to EN71-11:2005

Test Item(s)	CAS Number	MDL (mg/L)	Result(s) (Unit : mg/L)		Limit (mg/L)
			<u>1</u>	<u>2</u>	
Acrylamide	79-06-1	0.02	N.D.	N.D.	0.02
Bisphenol A	80-05-7	0.1	N.D.	N.D.	0.1
Formaldehyde	50-00-0	1	N.D.	N.D.	2.5
Phenol	108-95-2	1	N.D.	N.D.	15
Styrene	100-42-5	0.1	N.D.	N.D.	0.75

Sample description :

1. White Foam
2. Yellow PVC

Note: (1) N.D. = Not detected. (<MDL)  
 (2) MDL = Method Detection Limit

**Results :**

**2) Solvents migration**

Method : Sample preparation with reference to EN71-10:2005 followed by analysis with reference to EN71-11:2005

Test Item(s)	CAS Number	MDL (mg/L)	Result(s) (Unit : mg/L)		Limit (mg/L)
			<u>1</u>	<u>2</u>	
Trichloroethylene	79-01-6	0.01	N.D.	N.D.	0.02
Dichloromethane	75-09-2	0.03	N.D.	N.D.	0.06
2-Methoxyethyl acetate	110-49-6	0.25 (total)	N.D.	N.D.	0.5 (total)
2-Ethoxyethanol	110-80-5				
2-Ethoxyethyl acetate	111-15-9				
Bis(2-methoxyethyl) ether	111-96-6				
2-Methoxypropyl acetate	70657-70-4				
Methanol	67-56-1	3	N.D.	N.D.	5
Nitrobenzene	98-95-3	0.01	N.D.	N.D.	0.02
Cyclohexanone	108-94-1	2	N.D.	N.D.	46
3,5,5-Trimethyl-2-cyclohexene-1-one	78-59-1	0.1	N.D.	N.D.	3
Toluene	108-88-3	0.5	N.D.	N.D.	2
Ethylbenzene	100-41-4	0.5	N.D.	N.D.	1
Xylene (all isomers)	various	0.5	N.D.	N.D.	2 (total)

**Sample description :**

1. White Foam
2. Yellow PVC

Note: (1) N.D. = Not detected. (<MDL)  
 (2) MDL = Method Detection Limit

**Results :**

**3) Plasticizers migration**

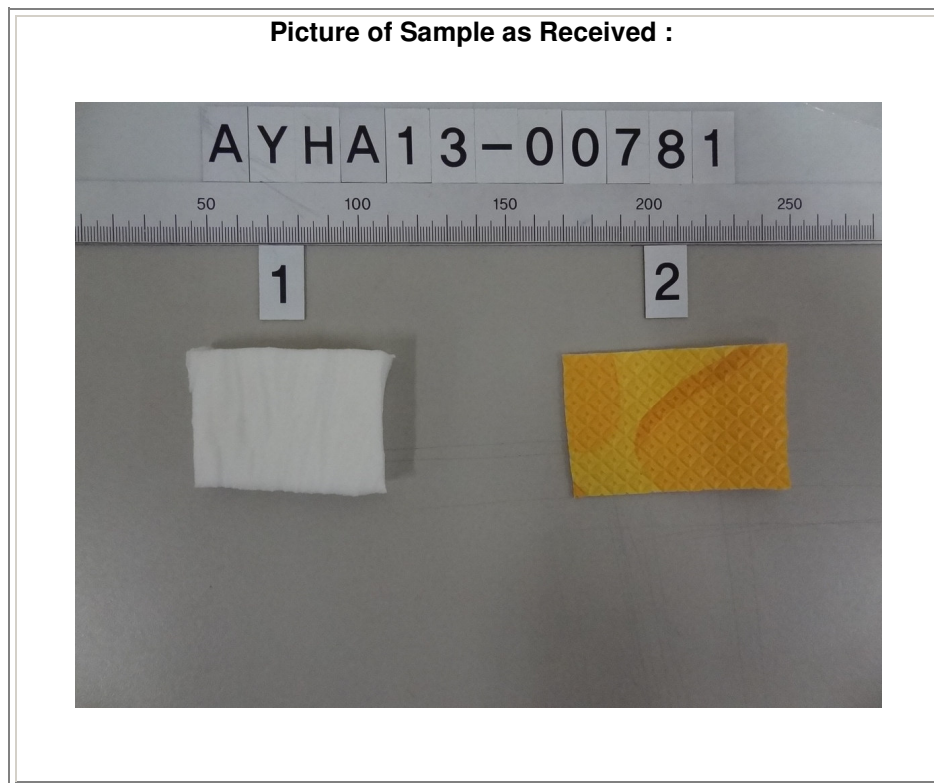
Method : Sample preparation with reference to EN71-10:2005 followed by analysis with reference to EN71-11:2005

Test Item(s)	CAS Number	MDL (mg/L)	Result(s) (Unit : mg/L)		Limit (mg/L)
			<u>1</u>	<u>2</u>	
Triphenyl phosphate	115-86-6	0.03	N.D.	N.D.	0.03
Tri-o-cresyl phosphate	78-30-8	0.03	N.D.	N.D.	0.03
Tri-m-cresyl phosphate	563-04-2	0.03	N.D.	N.D.	0.03
Tri-p-cresyl phosphate	78-32-0	0.03	N.D.	N.D.	0.03

**Sample description :**

- 1. White Foam
- 2. Yellow PVC

Note: (1) N.D. = Not detected. (<MDL)  
 (2) MDL = Method Detection Limit



\*\*\* End of Report \*\*\*