

## Safety Testing Confirmation

NO.: YD17-00935		Date: 2017-12-15		Processing day: 7	
Applicant	Company J World Industry		Corporate Registration No. 126-86-29870		
	Owner Han Jong Hee		Phone 02-858-7900		
	Address 59, Cheonwonsandan gil 1, Mado Myeun, Hwasung, Kyeonggido, South Korea				
Product	Product Baby Floor Playmat		Registration Number CB021H031-6002A		
	Category Playmat, Folding, PE, PU		Manufacturer J World Industry		
	Country of Origin South Korea		Model Name Eco Color Folder		

This confirmation is issued according to [Special Safety Act for Children's Products].

2017.12.15  
(Valid until 2021.11.15)

**Korea Conformity Laboratories**

## Picture of Tested Product

Company	J World Industry
Model Name	Eco Color Folder
Registration Number	CB021H031-6002A

J World Industry



# Test Result

**Korea Conformity Laboratories**

199, Gasan digital 1-ro, Geumcheon-gu, Seoul  
TEL: +82)2-2102-2500

Test confirmation No.  
YA16-03543

(logo)

## 1. Applicant

Company Name J World Industry	Corporate Registration No. 126-86-29870
Owner Han Jong Hee	Phone +82)2-858-7900
Address 59, Cheonwonsandan gil 1, Mado Myeun, Hwasung, Kyeonggido, Korea	

2. Purpose of the test result: To register Children's products under the Special Safety Act

## 3. Test item / Sample

Product Name	Model Name	Category	Manufacturer	Country of Origin
Baby Floor Playmat	Eco Coler Folder	Playmat, Folding, PE, PU	J World Industry	South Korea

4. Period of test: 2016. 09.26~2016.11.11

5. Test Method: Attachment 2

6. Test Result: Pass

Authorized Signatory Gwak Sun Jin	Technical Expert Kim Hae Gyu
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This report is the test result about the categories approved by KOLAS.

2016.11.11

**Korea Conformity Laboratories**

approved by KOLAS (Korea Laboratory Accreditation Scheme)

## Test Result

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Category		Limitaion	Test Result	Pass/Fail	
Small Pieces	Less than 36 Months	The item must not be fit into the cylinder at any angle.	Positive	Pass	
	36 Months and Up	A warning sign must be added, if the item fits into the cylinder. If there is a warning sign for product, which is targeted for older than 96 months, the product does not have to be tested.	-	-	
Edge	Sharp Edge, such as Glass or Metal	No sharp edge is allowed for an item, which is targeted for children younger than 96 months.	-	-	
	Function al Sharp Edge	Less than 36 Months	Sharp edge should be not accessible.	-	-
		36 Months and Up	A warning sign must be applied if there is a functional sharp edge (i.e., children's scissors or tools).	-	-
	Metal Products	Metal Edge on product for children younger than 96 months must be folded or rolled up without splinters. Otherwise, there should be permanent safety cap or proper finishing.	-	-	
	Synthetic Resin Casting	No splinters or sharp edges are not allowed on casted product for children younger than 96 months. Otherwise, there should be safety device to avoid it.	-	-	

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Category		Limitaion	Test Result	Pass/Fail
Edge	Edge of a Stick with Screw Nail or Spiral	Edge of a stick with screw nail or spiral must not have sharp edges, or must be protected with a safety cover.	-	-
Sharp End	Accessible Sharp End	Items for younger than 96 months must not have easily accessible sharp end.	Positive	Pass
	Functional Sharp Edge	Less than 36 months Sharp end must not be accessed easily.	-	-
	Functional Sharp Edge	36 months and up A warning sign must be applied if there a functional sharp end (i.e., children's items with needles)	-	-
	Wooden Items for children	Wooden items must not have any broken parts on edge and/or surface.	-	-
Magnetic Pieces	Magnetic/Electric Experiment Kits for Children older than 96 Months	If the magnetic flux is higher than 50 kG2mm2(0.5T2mm2), a warning sign must be applied.	-	-
	Items with magnetics/magnetic pieces	The magnetic flux must be lower than 50 kG2mm2(0.5T2mm2) or the item must not fit into the cylinder.	-	-

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Category	Standard	Test Result	Pass/Fail	
Physical/ Mechanical Features	Appearance	Must have no twists and dent in the shape.	Positive	Pass
	Appearance	Must have clear color without stains or color changes.	Positive	Pass
	Appearance	Must not have visible holes or scratches.	Positive	Pass
	Appearance	The painting must be smooth and must not be overpainted.	Positive	Pass
	Appearance	The signs and prints must be clear.	Positive	Pass
	Appearance	Finish must be smooth without dirt or stains.	Positive	Pass
	Appearance	There must no scratch, tear-off. The solvent and color must not come out.	Positive	Pass
	Appearance	Must not use offensive material or sexual content.	Positive	Pass
	Small Pieces	When tested under 5.1.2, a floor mat for children older than 36 months must have a warning sign for the parts fitting the cylinder.	Positive	Pass
	Edge	When tested under 5.1.3, there should be no harmful sharp edges or corners. If there is, it must be covered by safety caps.	Positive	Pass
	Sharp End	When tested under 5.1.4, there must be no harmful sharp ends.	Positive	Pass
	Protrusion	Any protrusion, which is potentially harmful, must be covered or sealed. The cover or seal must not be detached when tested under 5.1.5.	-	-
	Magnetic Pieces	Before/after 5.1.6 test, the magnetic flux must be lower than 50 kG2mm2(0.5T2mm2), and the piece must not be too small.	-	-

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Category	Test Item	Limitation	Test Result	Pass/Fail
Harmful Elements Elution (mg/kg)	Antimony (Sb)	Less than 60	Not found	Pass
	Arsenic (AS)	Less than 25	Not found	Pass
	barium (Ba)	Less than 1000	Not found	Pass
	Cadmium (Cd)	Less than 75	Not found	Pass
	Chromium (Cr)	Less than 60	Not found	Pass
	Lead (Pb)	Less than 90	16 (Only in the metal zipper)	Pass
	Mercury (Hg)	Less than 60	Not found	Pass
	Selenium (Se)	Less than 500	Not found	Pass
Total Phthalate Contents	DEHP	Total less than 0.1	Not found	Pass
	DBP		Not found	Pass
	BBP		Not found	Pass
	DNOP	Should have warning statement if found	Not found	Pass
	DINP		Not found	Pass
	DIDP		Not found	Pass
Formaldehyde (mg/kg)		Less than 20	Not found	Pass
Organic Compound (mg/kg)	DBT (Dibutyltin)	Less than 1.0	Not found	Pass
	TBT (Tributyltin)	Less than 0.5	Not found	Pass
Dimethyl Fumarate (mg/kg)		Less than 0.1	Not found	Pass
Allergic Dye		Should not use	Not found	Pass
Volatile Organic Compounds (mg/kg)	Toluene	Less than 1.40	Not found	Pass
	Formamide	Less than 0.2	Not found	Pass
	N,N-Dimethylformamide	Less than 0.40	Not found	Pass
	2-Ethylhexanoic acid	Less than 0.25	0.02	Pass
	Butylhydroxytoluene	Less than 0.50	0.01	Pass
	2-Methoxyethanol	Less than 0.30	Not found	Pass
	Formaldehyde	Less than 0.05	Not found	Pass

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Category	Test Item	Limitation	Test Result	Pass/Fail
Arylamine in the fabric (mg/kg)	4-Aminobiphenyl	Less than 10	Not found	Pass
	Benzidine	Less than 10	Not found	Pass
	4-Chloro-o-toluidine	Less than 10	Not found	Pass
	2-Naphthylamine	Less than 10	Not found	Pass
	o-Aminoazotoluene	Less than 10	Not found	Pass
	2-Amino-4-nitrotoluene	Less than 10	Not found	Pass
	p-Chloroaniline	Less than 10	Not found	Pass
	2,4 Diaminoanisole (4-Methoxy-m-Phenylenediamine)	Less than 10	Not found	Pass
	4,4'-Diaminodiphenylmethane	Less than 10	Not found	Pass
	3,3'-Dichlorobenzidine	Less than 10	Not found	Pass
	3,3 Dimethoxybenzidin	Less than 10	Not found	Pass
	3,3'-Dimethylbenzidine	Less than 10	Not found	Pass
	3,3'-Dimethyl-4,4'-Diaminodiphenylmethane	Less than 10	Not found	Pass
	p-Kresidine (2-Methoxy-5-Methylaniline)	Less than 10	Not found	Pass
	4,4'-Methylene-Bis-(2-Chloroaniline)	Less than 10	Not found	Pass
	4,4'-Oxydianiline	Less than 10	Not found	Pass
	4,4'-Thiodianiline	Less than 10	Not found	Pass
	o-Toluidine	Less than 10	Not found	Pass
	2,4-Toluenediamine	Less than 10	Not found	Pass
	2,4,5-Trimethylaniline	Less than 10	Not found	Pass
o-Anisidine	Less than 10	Not found	Pass	
2,4-Xylidine	Less than 10	Not found	Pass	
2,6-Xylidine	Less than 10	Not found	Pass	
4-Aminoazobenzene	Less than 10	Not found	Pass	



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### ■ Limitation

- Harmful Elements Elution (mg/kg): Sb:5, As:2, Ba:5, Cd:5, Cr:2, Pb:5, Hg:2, Se:5
- Total Phthalate Content (%): 0.001
- Formaldehyde (mg/kg): 20
- Total Lead (mg/kg): 10
- Total Cadmium (mg/kg): 5
- Organotin Compound (mg/kg): 0.5
- Arylamine in the fabric (mg/kg): 10
- Dimethyl Fumarate (mg/kg): 0.05
- Volatile Organic Compound [mg/(m<sup>2</sup>·h)]: 0.005

### ■ Analysis Equipment


- Harmful Element Elution, Total Lead, Total Cadmium: ICP-OES
- Formaldehyde: UV-Vis Spectrophotometer
- Total Phthalate Contents: GC/MS
- Organotin Compound, Arylamine in the fabric, Didethyl Fumarate: GC/MS
- pH in the fabric: pH meter
- Volatile Organic Compound: TD-GC/MS, HPLC

### ■ Remarks

- DEHP: Diethylhexyl phthalate
- DBP: Dibutyl phthalate
- BBP: Butyl benzyl Phthalate
- DNOP: Di-n-octyl phthalate
- DINP: Diisononyl phthalate
- DIDP: Diisodecyl phthalate

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Category	Standard	Test Result	Pass/Fail
Label	The information below must be added in the label and applied on each unit. It should be visible and not be easily removed. Cautions on usage can be added separately on the products or instruction manual.	-	-
Model Name			
Age of User			
Production Date			
Manufacturer Name			
Importing Company (Only for Imported Product)			
Address and Phone Number			
Country of Origin			
Warning Signs	<u>Floor mats for 36 months and up (mats with small parts)</u> Must add a warning text or the sign: "Warning! Not suitable for children under 3 years old. Choking Hazard - Small parts!"  <div style="text-align: center;">  </div>		
	<u>Floor mats containing more than 0.1% of Phthalate (DEHP, DBP, BBP, DINP, DIDP, DNOP)</u> Must add warning text: "Warning! This product can expose you to chemicals including Phthalates. Do not put it in your mouth."		
Cautions on Usage			

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Picture of Product

