

Report from Intertek Testing Services Ltd., Shanghai Jinqiao Branch

APPLICANT: Shangyu Jindalai Leather Carving Co., Ltd DATE: November 23, 2011

Shangyu Jindalai Leather Carving Co., Ltd 3rd Floor, Annex Building of Zhejiang AMP Masion, Taian Road, Binjiang District,

Hangzhou, Zhejiang, China

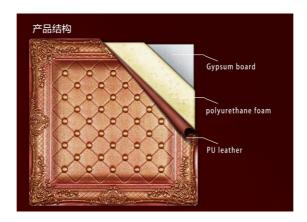
ATTN: Alice Zhan

SAMPLE DESCRIPTION:

THE SUBMITTED SAMPLES SAID TO BE Leather Wall Panel

ITEM NO. : DP2003-9#

COUNTRY OF ORIGIN : CHINA.



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TESTS CONDUCTED:

AS REQUESTED BY THE APPLICANT, FOR DETAILS REFER TO ATTACHED PAGE(S)

TO BE CONTINUED

AUTHORIZED BY:

FOR Intertek Testing Services Ltd., Shanghai Jinqiao Branch

Sun Sun

Technical Supervisor



## CONCLUSION:

TEST ITEM	Standard	RESULT	
Formaldehyde emission	ASTM D6007-02(2006)	0.05ppm SEE TEST CONDUCTED 1	
	EN 717-1:2004	0.05mg/m3 SEE TEST CONDUCTED 1	
RoHS	Requirement: 2002/95/EC and amendment 2005/618/EC	Pass SEE TEST CONDUCTED 2	
	Test Method: IEC62321 edition 1.0: 2008		
Resistance to accelerated weathering	ASTM G155-05a, cycle 1 (in Table X3.1)	Part showed slight color change after 500 hours exposure. SEE TEST CONDUCTED 3	
	ISO 4892-3:2006, cycle 1 (in Table 3)	Part showed slight color change after 500 hours exposure. SEE TEST CONDUCTED 3	
Phthalate Content	US Consumer Product Safety Improvement Act 2008 Title I, Sec 108 requirement on phthalate	Pass SEE TEST CONDUCTED 4	
	Phthalates content requirement in Annex XVII Items 51 & 52 of the REACH Regulation (EC) No. 1907/2006 & Amendment No. 552/2009 (formerly known as Directive 2005/84/EC)	Pass SEE TEST CONDUCTED 5	
Azocolourants content	Azocolourants content requirement in Annex XVII Item 43 of the REACH Regulation (EC) No. 1907/2006 & amendment No.552/2009 (formerly known as Directive 2002/61/EC)	Pass SEE TEST CONDUCTED 6	
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# AUTHORIZED BY:

FOR Intertek Testing Services Ltd., Shanghai Jinqiao Branch

Sun Sun

Technical Supervisor



TESTS CONDUCTED

- 1 Formaldehyde emission TEST
- 1.1 WITH REFERENCE TO ASTM D6007-02(2006).

Test Specimens

Length: 500mm Width: 500mm Quantity: 0.50m<sup>2</sup>

Single surface of specimens expose in the chamber by back-to-back mode

Q/A ratio: 0.43

Test Result:

Vs = 30 L V = 30 L P = 101 kPa T = 25 °C

 $Ct = 1.6655 \mu g$   $Ca = 0.3331 \mu g$ 

Fa = 5

Cs = 0.05 ppm

TESTING PERIOD: October 9, 2011 - October 28, 2011

1.2 WITH REFERENCE TO EN 717-1:2004.

Test Specimens

Length: 500mm Width: 500mm Quantity: 4

Test Result:

 $C = 0.05 \qquad mg/m^3$ 

TESTING PERIOD: October 9, 2011 - October 28, 2011

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TESTS CONDUCTED

RoHS Chemical Test

a) Test Result Summary:

Test components:

(a) PU leather(b) Water proof layer

(c) polyurethane foam

Testing Item		Result		
lesting item	(a)	(b)	(c)	
Cadmium (Cd) Content (mg/kg)	66	ND(<2)	ND(<2)	
Lead (Pb) Content (mg/kg)	ND(<2)	ND(<2)	ND(<2)	
Mercury (Hg) Content (mg/kg)	ND(<2)	ND(<2)	ND(<2)	
Chromium (VI)(Cr6+) Content (mg/kg)	ND(<1)	ND(<1)	ND(<1)	
Polybrominated Biphenyls (PBBs) (mg/kg)				
Monobromobiphenyl (MonoBB)	ND(<5)	ND(<5)	ND(<5)	
Dibromobiphenyl (DiBB)	ND(<5)	ND(<5)	ND(<5)	
Tribromobiphenyl (TriBB)	ND(<5)	ND(<5)	ND(<5)	
Tetrabromobiphenyl (TetraBB)	ND(<5)	ND(<5)	ND(<5)	
Pentabromobiphenyl (PentaBB)	ND(<5)	ND(<5)	ND(<5)	
Hexabromobiphenyl (HexaBB)	ND(<5)	ND(<5)	ND(<5)	
Heptabromobiphenyl (HeptaBB)	ND(<5)	ND(<5)	ND(<5)	
Octabromobiphenyl (OctaBB)	ND(<5)	ND(<5)	ND(<5)	
Nonabromobiphenyl (NonaBB)	ND(<5)	ND(<5)	ND(<5)	
Decabromobiphenyl (DecaBB)	ND(<5)	ND(<5)	ND(<5)	
Polybrominated Diphenyl Ethers (PBDEs) (mg/k	ig)			
Monobromodiphenyl Ether (MonoBDE)	ND(<5)	ND(<5)	ND(<5)	
Dibromodiphenyl Ether (DiBDE)	ND(<5)	ND(<5)	ND(<5)	
Tribromodiphenyl Ether (TriBDE)	ND(<5)	ND(<5)	ND(<5)	
Tetrabromodiphenyl Ether (TetraBDE)	ND(<5)	ND(<5)	ND(<5)	
Pentabromodiphenyl Ether (PentaBDE)	ND(<5)	ND(<5)	ND(<5)	
Hexabromodiphenyl Ether (HexaBDE)	ND(<5)	ND(<5)	ND(<5)	
Heptabromodiphenyl Ether (HeptaBDE)	ND(<5)	ND(<5)	ND(<5)	
Octabromodiphenyl Ether (OctaBDE)	ND(<5)	ND(<5)	ND(<5)	
Nonabromodiphenyl Ether (NonaBDE)	ND(<5)	ND(<5)	ND(<5)	
Decabromodiphenyl Ether (DecaBDE)	ND(<5)	ND(<5)	ND(<5)	

mg/kg = milligram per kilogram = ppm

ND = Not detected



TESTS CONDUCTED

b) RoHS Requirement

RESTRICTED SUBSTANCES	LIMITS
CADMIUM (Cd)	0.01% (100 mg/kg)
LEAD (Pb)	0.1% (1000 mg/kg)
MERCURY (Hg)	0.1% (1000 mg/kg)
CHROMIUM (VI) (Cr <sup>6+</sup> )	0.1% (1000 mg/kg)
POLYBROMINATED BIPHENYLS (PBBs)	0.1% (1000 mg/kg)
POLYBROMINATED DIPHENYL ETHERS (PBDEs)	0.1% (1000 ppm)

The above limits were quoted from 2002/95/EC and amendment 2005/618/EC.

## c) Test Method:

TESTING ITEM	TESTING METHOD	REPORTING LIMIT
CADMIUM (Cd) Content	With reference to IEC 62321 edition 1.0: 2008, by acid digestion and determined by ICP-OES	2 mg/kg
LEAD (Pb) Content	With reference to IEC62321 edition 1.0: 2008, by acid digestion and determined by ICP-OES	2 mg/kg
MERCURY (Hg) Content	With reference to IEC62321 edition 1.0: 2008, by acid digestion and determined by ICP-OES	2 mg/kg
CHROMIUM (VI) (Cr6+) Content	With reference to IEC62321 edition 1.0: 2008, by alkaline digestion and determined by UV-VIS spectrophotometer	1 mg/kg
POLYBROMINATED BIPHENYLS (PBBs):	With reference to IEC62321 edition 1.0: 2008, by solvent extraction and determined by GC/MS and further HPLC confirmation when necessary.	5 mg/kg
POLYBROMINATED DIPHENYL ETHERS (PBDEs):	With reference to IEC62321 edition 1.0: 2008, by solvent extraction and determined by GC/MS and further HPLC confirmation when necessary.	5 mg/kg

TESTING PERIOD : October 11, 2011 - October 14, 2011

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TESTS CONDUCTED

3 Resistance to accelerated weathering

3.1 WITH REFERENCE Requirement to ASTM G155-05a. Test specimens shall withstand 500 hours Weathering Test based on ASTM G155, cycle 1 (in Table X3.1). The weathering shall not have obvious impact on the finish (i.e. it shall not fade, crack, nor streak, etc.) Comments: Please refer to the pictures for details.



Part showed slight color change. There was no other visible surface damage. After 500 hours test, Gray Scale=4.

3.2 WITH REFERENCE Requirement to ISO 4892-2:2006. Test specimens shall withstand 500 hours Weathering Test based on ISO 4892-2, cycle 1 (in Table 3). The weathering shall not have obvious impact on the finish (i.e. it shall not fade, crack, nor streak, etc.) Comments: Please refer to the pictures for details.



Part showed slight color change. There was no other visible surface damage. After 500 hours test, Gray Scale=4.

TESTING PERIOD: October 11, 2011 - November 16, 2011

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TESTS CONDUCTED

## 4 Phthalate Content

Tested component: PU leather

As per CPSC-CH-C1001-09.3, by Gas Chromatographic-Mass Spectrometric (GC-MS) analysis.

	Result (%)	Limit (%)
Dibutyl phthalate (DBP)	<0.01	0.1
Di-(2-ethyl hexyl) phthalate (DEHP)	<0.01	0.1
Benzyl butyl phthalate (BBP)	<0.01	0.1
	Result (%)	Limit (%)
Di-iso-nonyl phthalate (DINP)	<0.01	0.1
Di-n-octyl phthalate (DNOP)	<0.01	0.1
Di-iso-decyl phthalate (DIDP)	<0.01	0.1

The above limit was quoted according to US Consumer Product Safety Improvement Act 2008 for prohibition on sale of certain products containing specified phthalates.

### < = Less than

Date sample received : October 11, 2011

Testing period: October 11, 2011 to October 15, 2011

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TESTS CONDUCTED

## 5 Phthalate Content

Tested component: PU leather

With reference to EN14372, by Gas Chromatographic-Mass Spectrometric (GC-MS) analysis.

Dibutyl phthalate (DBP) Di-(2-ethyl hexyl) phthalate (DEHP) Benzyl butyl phthalate (BBP)	Result (%) <0.01 <0.01 <0.01	Limit (%) 0.1 0.1 0.1
	Result (%)	Limit (%)
Di-iso-nonyl phthalate (DINP)	<0.01	0.1
Di-n-octyl phthalate (DNOP)	<0.01	0.1
Di-iso-decyl phthalate (DIDP)	<0.01	0.1

The above limit was quoted according to Annex XVII Items 51 & 52 of the REACH Regulation (EC) No. 1907/2006 & Amendment No. 552/2009 (formerly known as Directive 2005/84/EC) for phthalate content in toys and children articles.

### < = Less than

Date sample received : October 11, 2011

Testing period : October 11, 2011 to October 15, 2011

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TESTS CONDUCTED

#### 6 Azocolourants content

Tested component: PU leather

By Gas Chromatographic - Mass Spectrometric (GC-MS) and High Performance Liquid Chromatographic (HPLC) analysis.

Test method: Textile method (EN 14362-1: 2003)
Polyester method (EN 14362-2: 2003)

Forbidden Amine	CAS No.	Result	(mg/kg)
		Non-	
		polyester	Polyester
1. 4-Aminodiphenyl	92-67-1	N	N
2. Benzidine	92-87-5	N	N
3. 4-Chloro-o-toluidine	95-69-2	N	N
4. 2-Naphthylamine	91-59-8	N	N
5. o-Aminoazotoluene	97-56-3	N	N
6. 2-Amino-4-nitrotoluene	99-55-8	N	N
7. p-Chloroaniline	106-47-8	N	N
8. 2,4-Diaminoanisole	615-05-4	N	N
9. 4,4'-Diaminodiphenylmethane	101-77-9	N	N
10. 3,3'-Dichlorobenzidine	91-94-1	N	N
11. 3,3'-Dimethoxybenzidine	119-90-4	N	N
12. 3,3'-Dimethylbenzidine	119-93-7	N	N
13. 3,3'-Dimethyl-4,4'diaminodiphenylmethane	838-88-0	N	N
14. p-Cresidine	120-71-8	N	N
15. 4,4'-Methylene-bis(2-chloroaniline)	101-14-4	N	N
16. 4,4'-Oxydianiline	101-80-4	N	N
17. 4,4'-Thiodianiline	139-65-1	N	N
18. o-Toluidine	95-53-4	N	N
19. 2,4-Toluylenediamine	95-80-7	14	12
20. 2,4,5-Trimethylaniline	137-17-7	N	N
21. o-Anisidine	90-04-0	N	N
22. p-Aminoazobenzene $^{\omega}$	60-09-3	N	N

N = Not detected
Detection limit = 5 mg/kg
Requirement = 30 mg/kg

 $\omega$  = Azo colorants that are able to form p-aminoazobenzene, generate under the condition of this method aniline and 1,4-phenylenediamine. The presence of these colorants cannot be reliably ascertained without additional information, e.g. the chemical structure of the colorants used.

Date sample received : October 11, 2011

Testing period: October 11, 2011 to October 17, 2011

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END OF REPORT