

TEST REPORT

<u>APPLICANT</u>	: Mid Ocean Hong Kong Ltd.
<u>ADDRESS</u>	: 7/F, Kings Tower, 111 King Lam Street, Cheung Sha Wan, Kowloon, Hong Kong.
<u>ITEM NO. AND SAMPLE DESCRIPTION</u>	: MO6144 Bamboo cutting board MO6551 Bamboo cutting board with rope MO6488 Bamboo cutting board with groove MO6377 Bamboo lunch box 650ml MO6378 Bamboo lunch box 1000ml
<u>SAMPLE RECEIVED DATE</u>	: 05-Jul-2023 01-Nov-2023 for MO6551/6488/6377/6378
<u>TURN AROUND TIME</u>	: 05-Jul-2023 to 12-Jul-2023 01-Nov-2023 to 10-Nov-2023 for MO6551/6488/6377/6378
<u>REVISED DATE</u>	: 10-Nov-2023

The following test item(s) was/were performed on submitted sample(s) and/or component(s) confirmed by applicant

TEST REQUESTED	TEST METHOD/REGULATION	RESULT
Total Lead Content	REACH Annex XVII, Entry 63	Pass
Total Cadmium Content	REACH Annex XVII, Entry 23	Pass
Phthalates Content	REACH Annex XVII, Entry 51 & 52	Pass
Polycyclic Aromatic Hydrocarbons (PAHs)	REACH Annex XVII, Entry 50	Pass
Bisphenol A (BPA) Content	DGCCRF French Decree No. 2007-766	Pass
Specific Migration of Formaldehyde	LFGB Section 30 and 31	Pass
Specific Migration of Formaldehyde	French DGCCRF Note Information No. 2012-93	Pass
Pentachlorophenol (PCP) Content	German Chemicals Prohibition Ordinance (ChemVerbotsV) Article 15	Pass
Overall Migration	AP (2004) 5	Pass
Overall Migration	DGCCRF French Decree No. 2007-766	Pass
Specific Migration of Bisphenol A	(EU) No 10/2011 and its amendments	Pass
Volatile Organic Matter	French Arrêté du 25 Novembre 1992	Pass
Peroxide Value	French Arrêté du 25 Novembre 1992	Pass
Specific Migration of Organotin (as tin)	French Arrêté du 25 Novembre 1992	Pass
Banned AZO Dyes	REACH Annex XVII, Entry 43	Pass
Colour Fastness to Rubbing	EN ISO 105-X12:2016	Pass

Samples are obtained by express delivery, Results obtained refer only to samples, products or material received in Laboratory, as described in point related to sample description, and tested in conditions shown in present report. Eurofins Product Testing Service (Shanghai) Co., Ltd ensures that this job has been performed according to our Quality System and complying contract and legal conditions. If you happen to have any comments, please do it by sending email to info.sh@eurofins.com and referring to this report number. Reproduction of this document is only valid if it is done completely and under the written permission of Eurofins Product Testing Service (Shanghai) Co., Ltd. If you happen to have any complaints, please do it by sending email to chinacomplaint@eurofins.com and referring to this report number.



Note: This report cancels and supersedes report number EFSH23070321-CG-01 issued on Jul 12th, 2023.

Modification description:

1. As per client's request, add sample description, item No. and reference sample photo in the revised report.
2. As per client's request, add component No.3-5 of sample B for Total Lead Content, Total Cadmium Content, Phthalates Content, Polycyclic Aromatic Hydrocarbons (PAHs), Banned AZO Dyes and Colour Fastness to Rubbing tests in the revised report.

Eurofins (Shanghai) contact information

Customer service: SunnyZhang@eurofins.com/ +86 216 1819 181

Sales specialist: Jack.Zhang@cpt.eurofinscn.com/ +86 18601770010

***** FOR FURTHER DETAILS, PLEASE REFER TO THE FOLLOWING PAGE(S) *****

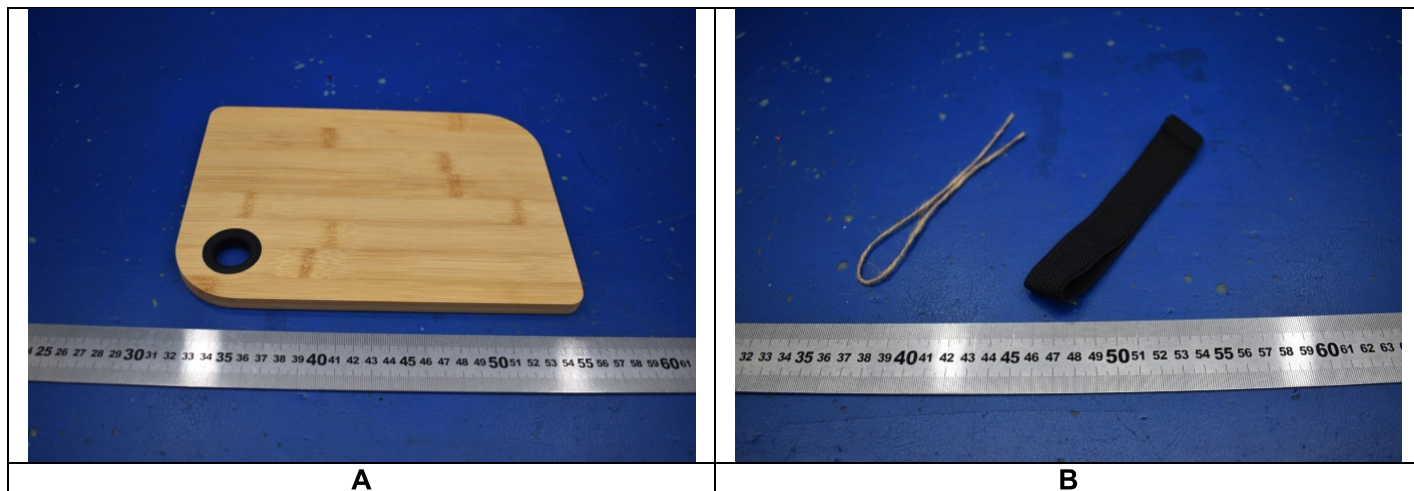
Signed for and on behalf of
Eurofins Product Testing Service (Shanghai) Co., Ltd



Conny Li
Assistant Lab Manager



TEST SAMPLE PHOTO(S)



EFSH23070321-CG-01+Rev 1

TO BE CONTINUED

REFERENCE SAMPLE PHOTO(S)



Note: The reference sample(s) has not been tested in current report, but according to customer's request, the picture has also been included. For sample tested in current report, please refer to "Test sample photo".

TO BE CONTINUED

COMPONENT LIST

Component No.	Component	Sample No.
1	Natural color bamboo	A
2	Black silicone ring	A
3	Brown fabric (hemp rope)	B
4	Black textile of black elastic band	B
5	Black rubber bands of black elastic band	B

TO BE CONTINUED

TEST RESULT

Total Lead Content

Test Request: Total lead content as specified in entry 63 of annex XVII of REACH Regulation (EC) No 1907/2006 and its amendment Regulation (EU) No 2015/628.

Test Method: EPA 3050B:1996, EPA 3051A:2007, EPA 3052:1996, acid digestion/ microwave digestion method was used, analysis was performed by ICP-OES.

Test Item(s)	Unit	Limit	MDL	Result	
				1	2
Lead (Pb)	mg/kg	500	10	ND	ND

Test Item(s)	Unit	Limit	MDL	Result	
				3	5
Lead (Pb)	mg/kg	500	10	ND	ND

Remark:

mg/kg = milligram per kilogram

MDL = method detection limit

ND = Not detected, less than MDL

Total Cadmium Content

Test Request: Total cadmium content as specified in Commission Regulation (EU) 2016/217 amending entry 23 of Annex XVII of REACH Regulation (EC) No 1907/2006.

Test Method: EPA 3050B:1996, EPA 3051A:2007, EPA 3052:1996, acid digestion/ microwave digestion method was used, analysis was performed by ICP-OES.

Test Item(s)	Unit	Limit	MDL	Result	
				1	2
Cadmium (Cd)	mg/kg	100	5	ND	ND

Test Item(s)	Unit	Limit	MDL	Result	
				5	
Cadmium (Cd)	mg/kg	100	5	ND	

Remark:

mg/kg = milligram per kilogram

MDL = method detection limit

ND = Not detected, less than MDL

TO BE CONTINUED

TEST RESULT

Phthalates Content

Test Request: Phthalates content as specified in entry 51&52 of annex XVII of REACH Regulation (EC) No 1907/2006 and its amendment Commission Regulation (EU) 2018/2005.

Test Method: EPA 3550C:2007, EPA 8270E:2018, solvent extraction and quantification by GC-MS.

Test Item(s)	CAS No.	Unit	Limit	MDL	Result
					2
Di-n-butyl phthalate (DBP)	84-74-2	%	-	0.005	ND
Benzylbutyl phthalate (BBP)	85-68-7	%	-	0.005	ND
Diethylhexyl phthalate (DEHP)	117-81-7	%	-	0.005	ND
Diisobutyl phthalate (DIBP)	84-69-5	%	-	0.005	ND
Sum of DEHP, DBP, BBP, DIBP	-	%	0.1	-	ND
Di-n-octyl phthalate (DNOP)	117-84-0	%	-	0.005	ND
Diisononyl phthalate (DINP)	28553-12-0	%	-	0.005	ND
Diisodecyl phthalate (DIDP)	26761-40-0	%	-	0.005	ND
Sum of DNOP, DINP, DIDP	-	%	0.1	-	ND

Test Item(s)	CAS No.	Unit	Limit	MDL	Result
					5
Di-n-butyl phthalate (DBP)	84-74-2	%	-	0.005	ND
Benzylbutyl phthalate (BBP)	85-68-7	%	-	0.005	ND
Diethylhexyl phthalate (DEHP)	117-81-7	%	-	0.005	ND
Diisobutyl phthalate (DIBP)	84-69-5	%	-	0.005	ND
Sum of DEHP, DBP, BBP, DIBP	-	%	0.1	-	ND
Di-n-octyl phthalate (DNOP)	117-84-0	%	-	0.005	ND
Diisononyl phthalate (DINP)	28553-12-0	%	-	0.005	ND
Diisodecyl phthalate (DIDP)	26761-40-0	%	-	0.005	ND
Sum of DNOP, DINP, DIDP	-	%	0.1	-	ND

Remarks:

MDL = method detection limit

ND = Not detected, less than MDL

"-"= Not Regulated

TO BE CONTINUED

TEST RESULT

Polycyclic Aromatic Hydrocarbons (PAHs)

Test Request: Polycyclic Aromatic Hydrocarbons (PAHs) content as specified in entry 50 of Annex XVII of REACH Regulation (EC) No 1907/2006 and its latest amendment.

Test Method: Solvent extraction and quantification by gas chromatography-mass selective detection (GC-MS) with respect to AfPS GS 2019:01 PAK

Test Item(s)	CAS No.	Unit	Limit	MDL	Result
					2
Benzo(a)anthracene	56-55-3	mg/kg	1	0.1	ND
Chrysene	218-01-9	mg/kg	1	0.1	ND
Benzo(b)fluoranthene	205-99-2	mg/kg	1	0.1	ND
Benzo(j)fluoranthene	205-82-3	mg/kg	1	0.1	ND
Benzo(k)fluoranthene	207-08-9	mg/kg	1	0.1	ND
Benzo(a)pyrene	50-32-8	mg/kg	1	0.1	ND
Dibenzo(a,h)anthracene	53-70-3	mg/kg	1	0.1	ND
Benzo(e)pyrene	192-97-2	mg/kg	1	0.1	ND

Test Item(s)	CAS No.	Unit	Limit	MDL	Result
					5
Benzo(a)anthracene	56-55-3	mg/kg	1	0.1	ND
Chrysene	218-01-9	mg/kg	1	0.1	ND
Benzo(b)fluoranthene	205-99-2	mg/kg	1	0.1	ND
Benzo(j)fluoranthene	205-82-3	mg/kg	1	0.1	ND
Benzo(k)fluoranthene	207-08-9	mg/kg	1	0.1	ND
Benzo(a)pyrene	50-32-8	mg/kg	1	0.1	ND
Dibenzo(a,h)anthracene	53-70-3	mg/kg	1	0.1	ND
Benzo(e)pyrene	192-97-2	mg/kg	1	0.1	ND

Remarks:

mg/kg = milligram per kilogram

MDL = method detection limit

ND = Not detected, less than MDL

TO BE CONTINUED

TEST RESULT

Bisphenol A (BPA) Content

Test Request: In accordance with French Décret 2007-766 and its amendment ,French Law 2012-1442 of 24 Dec 2012.

Test Method: With reference to EPA 3550C:2007, EPA 8321B:2007, analysis was performed by LC-MS.

Test Item(s)	CAS No.	Unit	Limit	MDL	Result
					2
Bisphenol A	80-05-7	mg/kg	0.1	0.1	ND

Remarks:

mg/kg = milligram per kilogram

MDL = method detection limit

ND = Not detected, less than MDL

TO BE CONTINUED

TEST RESULT

Specific Migration of Formaldehyde

Test Request: To determine the specific migration of formaldehyde for compliance with German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 and 31, and BfR recommendation.
 Test Method: With reference to Regulation (EU) No 10/2011 and its amendments for selection of test condition, and EN 13130-1:2004 for test preparation method, analysis was performed by UV-Vis/LC-MS.
 Simulant Used: 3% Acetic Acid
 Test Condition: 2h at 70° C

Test Item(s)	CAS No.	Unit	Limit	MDL	Result		
					1		
					1 st	2 nd	3 rd
Formaldehyde	50-00-0	mg/kg	15	1	ND	ND	ND

Remark:

mg/kg = milligram per kilogram

MDL = method detection limit

ND = Not detected, less than MDL

Test condition & simulant were specified by client.

TO BE CONTINUED

TEST RESULT

Specific Migration of Formaldehyde

Test Request: Specific migration of formaldehyde as specified in French Décret 2007-766 with amendments and French DGCCRF Note Information No. 2012-93.
 Test Method: With reference to Regulation (EU) No 10/2011 and its amendments for selection of test condition, and EN 13130-1:2004 for test preparation method, analysis was performed by UV-Vis/LC-MS.
 Simulant Used: 3% Acetic Acid
 Test Condition: 2h at 70° C

Test Item(s)	CAS No.	Unit	Limit	MDL	Result		
					1		
					1 st	2 nd	3 rd
Formaldehyde	50-00-0	mg/kg	15,15,15,15	1	ND	ND	ND

Remark:

mg/kg = milligram per kilogram

MDL = method detection limit

ND = Not detected, less than MDL

Test condition & simulant were specified by client.

Pentachlorophenol (PCP) Content

Test Request: Pentachlorophenol (PCP) content as specified in German Chemicals Prohibition Ordinance (ChemVerbotsV) Article 15.
 Test Method: With reference to EPA 3550C:2007, EPA 8270E:2018, solvent extraction and quantification by GC-MS.

Test Item(s)	CAS No.	Unit	Limit	MDL	Result
					1
Pentachlorophenol (PCP)	87-86-5	mg/kg	5	0.5	ND

Remarks:

mg/kg = milligram per kilogram

MDL = method detection limit

ND = Not detected, less than MDL

TO BE CONTINUED

TEST RESULT

Overall Migration

Test Request: In accordance with Council of Europe Resolution AP (2004) 5.

Test Method: According to appropriate method of EN1186-3:2022 method 1a, method 2, method 5 for evaporable simulants, EN 1186-2:2022 method 1 for fatty food simulants.

Simulant Used	Time	Temperature	Unit	Limit	Result		
					2		
					1 st	2 nd	3 rd
3% Acetic Acid	2h	70° C	mg/dm ²	10	<3.0	<3.0	<3.0
10% Ethanol	2h	70° C	mg/dm ²	10	<3.0	<3.0	<3.0
95% Ethanol	2h	60° C	mg/dm ²	10	<3.0	<3.0	<3.0
Isoctane	30min	40° C	mg/dm ²	10	<3.0	<3.0	<3.0

Remark:

mg/dm² = milligram per square decimeter

Analytical tolerance of evaporable simulants is 2 mg/dm²

Analytical tolerance of fatty food simulant (olive oil) is 3 mg/dm²

Test condition & simulant were specified by client.

TO BE CONTINUED

TEST RESULT

Overall Migration

Test Request: To determine the Overall Migration for compliance with French Décret 2007-766 with its amendments and French Arrêté du 25 Novembre 1992.

Test Method: According to appropriate method of EN1186-3:2022 method 1a, method 2, method 5 for evaporable simulants, EN 1186-2:2022 method 1 for fatty food simulants.

Simulant Used	Time	Temperature	Unit	Limit	Result		
					2		
					1 st	2 nd	3 rd
3% Acetic Acid	2h	70° C	mg/dm ²	10	<3.0	<3.0	<3.0
10% Ethanol	2h	70° C	mg/dm ²	10	<3.0	<3.0	<3.0
95% Ethanol	2h	60° C	mg/dm ²	10	<3.0	<3.0	<3.0
Isoctane	30min	40° C	mg/dm ²	10	<3.0	<3.0	<3.0

Remark:

mg/dm² = milligram per square decimeter

Analytical tolerance of evaporable simulants is 2 mg/dm²

Analytical tolerance of fatty food simulant (olive oil) is 3 mg/dm²

Test condition & simulant were specified by client.

TO BE CONTINUED

TEST RESULT

Specific Migration of Bisphenol A

Test Request: To determine the specific migration of bisphenol A compliance with Commission Regulation (EU) No 10/2011 and its amendments relating to plastic materials and articles intended to come into contact with foodstuffs.

Test Method: With reference to Regulation (EU) No 10/2011 and its amendments for selection of test condition, and EN 13130-1:2004 for test preparation method, analysis was performed by LC-MS/MS.

Simulant Used: 3% Acetic Acid

Test Condition: 70°C, 2 hours

Test Item(s)	CAS No.	Unit	Limit	MDL	Result		
					2		
					1 st	2 nd	3 rd
Bisphenol A	80-05-7	mg/kg	0.05	0.01	ND	ND	ND

Remark:

mg/kg = milligram per kilogram

MDL = method detection limit

ND = Not detected, less than MDL

Test condition & simulant were specified by client.

TO BE CONTINUED

TEST RESULT

Volatile Organic Matter

Test Request: To determine the volatile organic matter for compliance with French Décret No. 2007-766 and its amendments, and French Arrêté du 25 Novembre 1992 for silicon materials.

Test Method: According to French Arrêté du 25 Novembre 1992, Annex III.

Test Item(s)	Unit	Limit	MDL	Result
				2
Volatile organic compound	%	0.5	0.1	ND

Remark:

% = percentage of weight by weight

MDL = method detection limit

ND = Not detected, less than MDL

Peroxide Value

Test Request: To determine the peroxide values for compliance with French Décret No. 2007-766 and its amendments, and French Arrêté du 25 Novembre 1992 for silicon materials. Test with reference to European pharmacopoeia 9.0-2.5.5.

Sample	Limit	Result
2	Absent	Absent

TO BE CONTINUED

TEST RESULT

Specific Migration of Organotin (as tin)

Test Request: To determine the specific migration of organotin (as tin) for compliance with French Decree No. 2007-766 and its amendments, and French Arrêté du 25 Novembre 1992 for silicon materials.

Test Method: With reference to EN 13130-1:2004 for test preparation method, analysis was performed by ICP-MS.

Simulant Used: 3% Acetic Acid

Test Condition: 70° C 2h

Test Item(s)	Unit	Limit	MDL	Result		
				2		
				1 st	2 nd	3 rd
Tin (Sn)	mg/kg	0.1	0.01	ND	ND	ND

Remark:

mg/kg = milligram per kilogram

MDL = method detection limit

ND = Not detected, less than MDL

Test condition & simulant were specified by client.

TO BE CONTINUED

TEST RESULT

Banned AZO Dyes

Test Request: Banned AZO dyes as specified in entry 43 of annex XVII of REACH Regulation (EC) No 1907/2006.

Test Method: EN ISO 14362-1:2017, sampling procedure and sample preparation according to Annex E4.2 and Annex E4.3.

Test Item(s)	CAS No.	Unit	Limit	MDL	Result
					4
4-methyl-m-phenylenediamine	95-80-7	mg/kg	30	5	ND
4-Amino-azobenzene (Note 2)	60-09-3	mg/kg	30	5	ND
2-Naphthylamine	91-59-8	mg/kg	30	5	ND
4,4'-methylenedi-o-toluidine	838-88-0	mg/kg	30	5	ND
Bis-(4-aminophenyl)methane	101-77-9	mg/kg	30	5	ND
4,4'-Oxydianiline	101-80-4	mg/kg	30	5	ND
4,4'-Thiodianiline	139-65-1	mg/kg	30	5	ND
Benzidine	92-87-5	mg/kg	30	5	ND
o-Toluidine	95-53-4	mg/kg	30	5	ND
5-Nitro-o-toluidine (Note 1)	99-55-8	mg/kg	30	5	ND
4-methoxy-m-phenylenediamine	615-05-4	mg/kg	30	5	ND
4,4'-Methylene-bis-(2-chloroaniline)	101-14-4	mg/kg	30	5	ND
o-Aminoazotoluene (Note 1)	97-56-3	mg/kg	30	5	ND
2,4,5-Trimethylaniline	137-17-7	mg/kg	30	5	ND
4-Aminobiphenyl	92-67-1	mg/kg	30	5	ND
o-Anisidine	90-04-0	mg/kg	30	5	ND
3,3'-Dichlorobenzidine	91-94-1	mg/kg	30	5	ND
4-Chloroaniline	106-47-8	mg/kg	30	5	ND
3,3'-Dimethoxybenzidine	119-90-4	mg/kg	30	5	ND
n.d.3,3'-Dimethybenzidine	119-93-7	mg/kg	30	5	ND
2-Methoxy-5-methylaniline	120-71-8	mg/kg	30	5	ND
4-Chloro-2-methylaniline	95-69-2	mg/kg	30	5	ND

Remarks:

As per client's request, only the appointed materials have been tested.

Note 1: The CAS-numbers 97-56-3 and 99-55-8 are further reduced to CAS-numbers 95-53-4 and 95-80-7.

Note 2: 4-Amino-azobenzene(CAS No.:60-09-3) is reduced to aniline and 1,4-phenylenediamine.

mg/kg = milligram per kilogram

MDL = method detection limit

ND = Not detected, less than MDL

TO BE CONTINUED

TEST RESULT

Colour Fastness to Rubbing

EN ISO 105-X12:2016.

	(4)	Requirement:
Lengthwise-Dry	4-5	Grade 2-3
Lengthwise-Wet	4-5	Grade 2-3
Widthwise-Dry	/	Grade 2-3
Widthwise-Wet	/	Grade 2-3

Remark:

Grey Scale for Assessing Colour Change/Staining

Grade 5 Negligible or no change/staining

Grade 4 Slightly changed/stained

Grade 3 Noticeably changed/stained

Grade 2 Considerably changed/stained

Grade 1 Much changed/stained

The test was subcontracted to Eurofins Product Testing Service (Shanghai) Co., Ltd. Hangzhou Branch.

*****END OF THE REPORT*****