

## TEST REPORT

Test Report # 19A-007077-2 Date of Report Issue: November 25, 2019  
Date of Sample Received: November 19, 2019 Pages: Page 1 of 15

### CLIENT INFORMATION:

Company: Mid Ocean Brands B.V.  
Address: 7/F, Kings Tower, 111 King Lam Street, Cheung Sha Wan, Kowloon, Hong Kong



### SAMPLE INFORMATION:

Product Name: ①Single wall tumbler②Reusable mug with handle  
Style No.: - Labeled Age Grade: -  
Order No.(PO No.): - Client Request Age Grade: -  
Country of Origin: - Recommended Age Grade: -  
Country of Distribution: Europe Tested Age Grade: -  
Model No.: ①MO6106②MO6107  
Composition/Main Material: ①-②Coffee husk,silicone  
Buyer Name: Mid Ocean Brands B.V.  
Supplier Name: 100396  
Testing Period: 11/19/2019-11/25/2019

### OVERALL RESULT:

 **PASS**

Please refer to the following pages for test result summary and appropriate notes.

QIMA (HANGZHOU) TESTING CO., LTD.

*Kevin Lee*

Kevin Lee  
Technical Manager



QIMA (HANGZHOU) TESTING CO., LTD. ♦ 4-5/F A2 BLDG NO. 1213 HUOJU SOUTH ROAD PUYAN STREET BINJIANG DISTRICT HANGZHOU CHINA

♦ Email: Labtesting@qima.com ♦ Tel: (86) 571 8999 7158.

Test(s) marked with 'φ' was subcontracted to external laboratory.

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**TEST RESULTS SUMMARY:**

At the request of the client, the following tests were conducted:

CONCLUSION	TEST(S) CONDUCTED
PASS	Regulation (EC) No. 1907/2006 REACH Annex XVII, Item 63 Lead in Substrate Materials
PASS	Regulation (EC) No. 1907/2006 REACH Annex XVII, Item 23 Cadmium in Substrate Materials
PASS	Regulation (EC) No. 1907/2006 REACH Annex XVII, Item 22 Pentachlorophenol
PASS	Regulation (EC) No. 1907/2006 REACH Annex XVII as amended, Item 51 and 52 Phthalates – Mouthable (DBP, BBP, DEHP, DIBP, DnOP, DINP, DIDP)
PASS	Regulation (EC) No 1935/2004, (EU) No 10/2011 -Sensorial examination odour and taste test
PASS	Regulation (EC) No 1935/2004, (EU) No 10/2011, its amendment (EU) 2016/1416 and Res AP(2004)5- Overall migration
PASS	Regulation (EC) No 1935/2004, (EU) No 10/2011 and its amendment (EU) 2016/1416- Specific migration of heavy metals
PASS	Regulation (EC) No 1935/2004, (EU) No 10/2011 -Specific migration of Primary Aromatic Amines
PASS	Regulation (EC) No 1935/2004, (EU) No 10/2011 -Specific migration of Bisphenol A
PASS	Regulation (EC) No 1935/2004, (EU) No 10/2011 and Commission Regulation (EU) 2015/174- Specific migration of formaldehyde

Remark: Test results are transferred from test report no. 19A-007077-1 date: 11/25/2019



**DETAILED RESULTS:**

**Regulation (EC) No. 1907/2006 REACH Annex XVII, Item 63 Lead in Substrate Materials**

Test Method: CPSC-CH-E1001-08.3 (Metal) and/or CPSC-CH-E1002-08.3 (Non-Metal)  
 Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

Specimen No.	1+4	2+3	---	---	---	Limit (mg/kg)
Test Item	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
Total Lead (Pb)	ND	ND	---	---	---	<b>500</b>
<b>Conclusion</b>	PASS	PASS	---	---	---	

*Note:*

mg/kg = Milligrams per kilogram

LT = Less than

ND = Not detected (Reporting Limit = 15 mg/kg)

Composite results are based on specimen of least mass resulting in highest potential concentration.



**DETAILED RESULTS:**

**Regulation (EC) No. 1907/2006 REACH Annex XVII, Item 23 Cadmium in Substrate Materials**

Test Method: ASTM F963-17 Clause 8.3.1

Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

Specimen No.	1+4	2+3	---	---	---	Limit (mg/kg)
Test Item	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
Total Cadmium (Cd)	ND	ND	---	---	---	<b>100</b>
<b>Conclusion</b>	PASS	PASS	---	---	---	

*Note:*

mg/kg = Milligrams per kilogram

LT = Less than

ND = Not detected (Reporting Limit = 15mg/kg)

Composite results are based on specimen of least mass resulting in highest potential concentration.



**DETAILED RESULTS:**

**Regulation (EC) No. 1907/2006 REACH Annex XVII, Item 22 Pentachlorophenol**

Test Method: In-House Method  
 Analytical Method: Gas Chromatography with Mass Spectrometry

Specimen No.	1	---	---	---	Limit (mg/kg)
Test Item CAS No.	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
Pentachlorophenol (PCP) 87-86-5	ND	---	---	---	<b>1000</b>
<b>Conclusion</b>	PASS	---	---	---	

*Note:*  
 mg/kg = Milligrams per kilogram  
 LT = Less than  
 ND = Not detected (Reporting Limit = 1 mg/kg)



**DETAILED RESULTS:**

**Regulation (EC) No. 1907/2006 REACH Annex XVII as amended, Item 51 and 52 Phthalates – Mouthable (DBP, BBP, DEHP, DIBP, DnOP, DINP, DIDP)**

Test Method: CPSC-CH-C1001-09.4  
 Analytical Method: Gas Chromatography with Mass Spectrometry

Specimen No.		1+4	2+3	---	Limit (mg/kg)
Test Item	CAS No.	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
Dibutyl phthalate (DBP)	84-74-2	ND	ND	---	<b>1000</b>
Benzyl butyl phthalate (BBP)	85-68-7	ND	ND	---	<b>1000</b>
Di-(2-ethylhexyl) phthalate (DEHP)	117-81-7	ND	ND	---	<b>1000</b>
Diisobutyl phthalate (DIBP)	84-69-5	ND	ND	---	<b>1000</b>
Sum of DBP, BBP, DEHP, DIBP		ND	ND	---	<b>1000</b>
Di-n-octyl phthalate (DnOP)	117-84-0	ND	ND	---	
Diisononyl phthalate (DINP)	28553-12-0 68515-48-0	ND	ND	---	
Diisodecyl phthalate (DIDP)	26761-40-0 68515-49-1	ND	ND	---	
Sum of DnOP, DINP, DIDP		ND	ND	---	<b>1000</b>
<b>Conclusion</b>		PASS	PASS	---	

**Note:**  
 mg/kg (Milligrams per kilogram) = ppm (Parts per million) = 0.0001 % m/m (Percent by mass)  
 LT = Less than  
 ND = Not detected (Reporting Limit = 150 mg/kg)  
 Composite results are based on specimen of least mass resulting in highest potential concentration.



**DETAILED RESULTS:**

**Regulation (EC) No 1935/2004, (EU) No 10/2011 -Sensorial examination odour and taste test**

Test Method: DIN 10955: 2004  
 Test condition: 70°C, 2 hours  
 Test media: Distilled water  
 No. of panelist: 6

Specimen No.	5	---	---	---	Max.Permissible Limit
Test Item	Result	Result	Result	Result	
Sensorial examination odour (Point scale)	0	---	---	---	2.5
Sensorial examination taste (Point scale)	0	---	---	---	2.5
<b>Conclusion</b>	PASS	---	---	---	

Scale evaluation:

- 0: No perceptible odour
- 1: Odour just perceptible (still difficult to define)
- 2: Moderate odour
- 3: Moderately strong odour
- 4: Strong odour



**DETAILED RESULTS:**

**Regulation (EC) No 1935/2004, (EU) No 10/2011, its amendment (EU) 2016/1416 and Res AP(2004)5-  
Overall migration**

Test method: EN1186-1:2002: for selection of conditions and test methods  
 EN1186-3:2002: aqueous food simulants by total immersion  
 EN1186-9:2002: aqueous food simulants by article filling

Specimen No.		1	3	4	Maximum permissible Limit (mg/dm <sup>2</sup> )
Simulant used	Test condition	Result (mg/dm <sup>2</sup> )	Result (mg/dm <sup>2</sup> )	Result (mg/dm <sup>2</sup> )	
10% ethanol	2 hours at 70°C	ND	ND	ND	10
<b>Conclusion</b>		PASS	PASS	PASS	

Note:  
 mg/dm<sup>2</sup> =milligram per square decimeter  
 ND = Not Detected (Reporting limit = 3 mg/dm<sup>2</sup>)





**DETAILED RESULTS:**

**Regulation (EC) No 1935/2004, (EU) No 10/2011 and its amendment (EU) 2016/1416- Specific migration of heavy metals**

Test method: Sample preparation in 3% acetic acid at 70°C for 2hours ,ISO 17294-2:2016

Analytical Method: Inductively Coupled Plasma-Mass Spectrometry

Specimen No.		1	---	---	---	Maximum permissible Limit (mg/kg)
Test Item	Detection limit	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
Barium	0.1	ND	---	---	---	1
Cobalt	0.05	ND	---	---	---	0.05
Copper	0.5	ND	---	---	---	5
Iron	1.0	ND	---	---	---	48
Lithium	0.1	ND	---	---	---	0.6
Manganese	0.1	ND	---	---	---	0.6
Zinc	1.0	ND	---	---	---	5
Aluminum	0.1	ND	---	---	---	1
Nickel	0.01	ND	---	---	---	0.02
<b>Conclusion</b>		PASS	---	---	---	

Note:

mg/kg=milligram per kilogram

ND= Not Detected



**DETAILED RESULTS:**

**Regulation (EC) No 1935/2004, (EU) No 10/2011 -Specific migration of Primary Aromatic Amines**

Test Method: In House Method

Analytical Method: Gas Chromatography with Mass Spectrometry

Specimen No.		1	---	---	---	Limit (mg/kg)
Test Item	Test condition	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
Primary Aromatic Amines migration	70°C, 2hours 3% Acetic acid	ND	---	---	---	Non-detectable
<b>Conclusion</b>		PASS	---	---	---	

Note :

mg/kg = milligram per kilogram = ppm

ND = Not Detected (Reporting Limit= 0.01mg/kg )



**DETAILED RESULTS:**

**Regulation (EC) No 1935/2004, (EU) No 10/2011 -Specific migration of Bisphenol A**

Test method: EN 13130-1:2004 & DD CEN/TS 13130-13:2005

Specimen No.		1	3	---	---	---	Limit (mg/kg)
Test Item	Test condition	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
Bisphenol A (BPA)	70°C, 2hours 3% Acetic acid	ND	ND	---	---	---	0.05
<b>Conclusion</b>		PASS	PASS	---	---	---	

Note :

mg/kg = milligram per kilogram = ppm

ND = Not Detected (Reporting Limit= 0.05mg/kg )



**DETAILED RESULTS:**

**Regulation (EC) No 1935/2004, (EU) No 10/2011 and Commission Regulation (EU) 2015/174- Specific migration of formaldehyde**

Test method: EN 13130-1:2004 & DD CEN/TS 13130-23:2005

Specimen No.		1	---	---	---	---	Limit (mg/kg)
Test Item	Test condition	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
Formaldehyde	70°C, 2hours 3% Acetic acid	ND	---	---	---	---	15
<b>Conclusion</b>		PASS	---	---	---	---	

*Note :*

mg/kg = milligram per kilogram = ppm

ND = Not Detected (Reporting Limit= 3mg/kg )



**SPECIMEN DESCRIPTION:**

Specimen No.	Specimen Description	Location
1	Dark coffee plastic	Main body(coffee cup style)
2	White soft plastic	Main body(coffee cup style)
3	White soft plastic	Lid(coffee cup style)
4	Dark coffee plastic	Main body(mug style)
5	Single wall tumbler	Finished product(coffee cup style)



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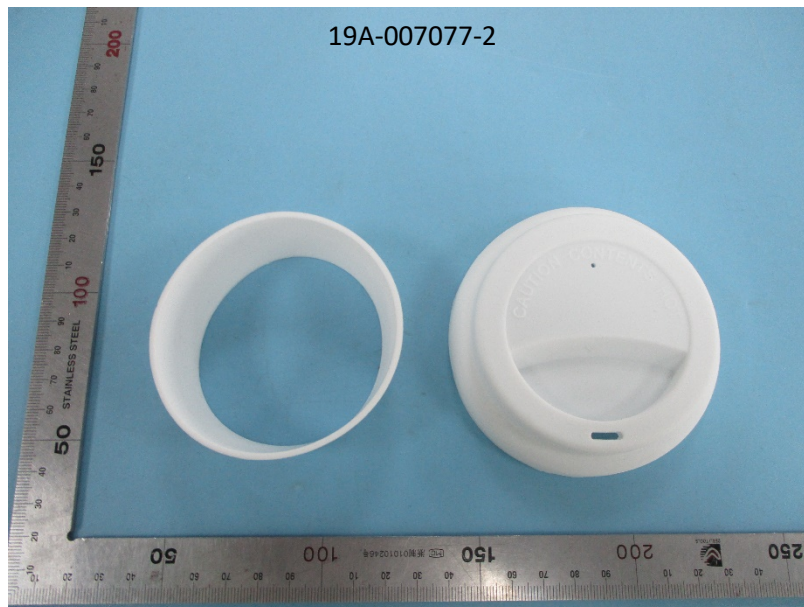
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**SAMPLE PHOTO:**





**SAMPLE PHOTO:**



-End Report-

