



# TEST REPORT

Test Report # 19A-005663-2 Date of Report Issue: September 29, 2019  
 Date of Sample Received: September 23, 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: 600ml aluminium bottle with foldable mouth piece in lid  
 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.: MO9840  
 Composition/Main Material: Aluminum,PS,PP,PE  
 Buyer Name: Mid Ocean Brands B.V.  
 Supplier Name: 100396  
 Testing Period: 09/23/2019-09/29/2019

## OVERALL RESULT:



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

HANGZHOU ASIAINSPECTION TESTING TECHNOLOGY CO., LTD

*Kevin Lee*

Kevin Lee  
Technical Manager



HANGZHOU ASIAINSPECTION TESTING TECHNOLOGY CO., LTD ♦ Email: Labtesting@qima.com ♦ Tel: (86) 571 8999 7158  
5/F A2 Building ♦ No. 1213 Huoju South Road ♦ Puyan Street ♦ Binjiang District ♦ Hangzhou ♦ China

The test result(s) and conclusion(s) in this report relate to the sample(s) tested as described herein.  
This test report may not be reproduced in whole or in part, without written approval of Hangzhou Asiainspection Testing Technology Co., Ltd



# TEST REPORT

Test Report # 19A-005663-2 Date of Report Issue: September 29, 2019  
 Date of Sample Received: September 23, 2019 Pages: Page 2 of 15

## 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 Paints and Surface Coatings
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 Paints and Surface Coatings
PASS	Regulation (EC) No. 1907/2006 REACH Annex XVII, Item 23 Cadmium in Substrate Materials
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 and its amendment (EU) 2016/1416- 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 Bisphenol A
PASS	Regulation (EC) No 1935/2004 and Council of Europe Resolution CM Res(2013)9 on metals and alloys used in food contact materials and articles - Specific release of heavy metals

Remark: Test results are transferred from test report no. 19A-005663-1 date: 09/29/2019



HANGZHOU ASIAINPECTION TESTING TECHNOLOGY CO., LTD ♦ Email: Labtesting@qima.com ♦ Tel: (86) 571 8999 7158  
 5/F A2 Building ♦ No. 1213 Huoju South Road ♦ Puyan Street ♦ Binjiang District ♦ Hangzhou ♦ China

*The test result(s) and conclusion(s) in this report relate to the sample(s) tested as described herein.  
 This test report may not be reproduced in whole or in part, without written approval of Hangzhou Asiainpection Testing Technology Co., Ltd*



**DETAILED RESULTS:**

**Regulation (EC) No. 1907/2006 REACH Annex XVII, Item 63 Lead in Paints and Surface Coatings**

Test Method: CPSC-CH-E1003-09.1

Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

Specimen No.	8	9	10	11	12	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	ND	ND	ND	<b>500</b>
<b>Conclusion</b>	PASS	PASS	PASS	PASS	PASS	

*Note:*

mg/kg = Milligrams per kilogram

LT = Less than

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





**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.	2	3	4	5	6	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	ND	ND	ND	<b>500</b>
<b>Conclusion</b>	PASS	PASS	PASS	PASS	PASS	

Specimen No.	7	---	---	---	---	Limit (mg/kg)
Test Item	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
Total Lead (Pb)	66	---	---	---	---	<b>500</b>
<b>Conclusion</b>	PASS	---	---	---	---	

*Note:*

mg/kg = Milligrams per kilogram

LT = Less than

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





**DETAILED RESULTS:**

**Regulation (EC) No. 1907/2006 REACH Annex XVII, Item 23 Cadmium in Paints and Surface Coatings**

Test Method: ASTM F963-17 Clause 8.3.1

Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

Specimen No.	8	9	10	11	12	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	ND	ND	ND	<b>100</b>
<b>Conclusion</b>	PASS	PASS	PASS	PASS	PASS	

*Note:*

mg/kg = Milligrams per kilogram

LT = Less than

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





**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.	2	3	4	5	6	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	ND	ND	ND	<b>100</b>
<b>Conclusion</b>	PASS	PASS	PASS	PASS	PASS	

Specimen No.	7	---	---	---	---	Limit (mg/kg)
Test Item	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
Total Cadmium (Cd)	ND	---	---	---	---	<b>100</b>
<b>Conclusion</b>	PASS	---	---	---	---	

*Note:*

mg/kg = Milligrams per kilogram

LT = Less than

ND = Not detected (Reporting Limit = 15mg/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.		2	3+6	4	Limit (mg/kg)
Test Item	CAS No.	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
Dibutyl phthalate (DBP)	84-74-2	ND	ND	ND	<b>1000</b>
Benzyl butyl phthalate (BBP)	85-68-7	ND	ND	ND	<b>1000</b>
Di-(2-ethylhexyl) phthalate (DEHP)	117-81-7	ND	ND	ND	<b>1000</b>
Diisobutyl phthalate (DIBP)	84-69-5	ND	ND	ND	<b>1000</b>
Sum of DBP, BBP, DEHP, DIBP		ND	ND	ND	<b>1000</b>
Di-n-octyl phthalate (DnOP)	117-84-0	ND	ND	ND	
Diisononyl phthalate (DINP)	28553-12-0 68515-48-0	ND	ND	ND	
Diisodecyl phthalate (DIDP)	26761-40-0 68515-49-1	ND	ND	ND	
Sum of DnOP, DINP, DIDP		ND	ND	ND	<b>1000</b>
<b>Conclusion</b>		PASS	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. 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.		5	---	---	Limit (mg/kg)
Test Item	CAS No.	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
Dibutyl phthalate (DBP)	84-74-2	ND	---	---	1000
Benzyl butyl phthalate (BBP)	85-68-7	ND	---	---	1000
Di-(2-ethylhexyl) phthalate (DEHP)	117-81-7	ND	---	---	1000
Diisobutyl phthalate (DIBP)	84-69-5	ND	---	---	1000
Sum of DBP, BBP, DEHP, DIBP		ND	---	---	1000
Di-n-octyl phthalate (DnOP)	117-84-0	ND	---	---	
Diisononyl phthalate (DINP)	28553-12-0 68515-48-0	ND	---	---	
Diisodecyl phthalate (DIDP)	26761-40-0 68515-49-1	ND	---	---	
Sum of DnOP, DINP, DIDP		ND	---	---	1000
<b>Conclusion</b>		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)







**DETAILED RESULTS:**

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

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

Specimen No.		2	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
3% acetic acid	2 hours at 70°C	ND	ND	ND	10
<b>Conclusion</b>		PASS	PASS	PASS	

Specimen No.		5	---	---	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	---	---	10
3% acetic acid	2 hours at 70°C	ND	---	---	10
<b>Conclusion</b>		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-Optical Emission Spectrometry

Specimen No.		2	3	4	5	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	ND	ND	ND	1
Cobalt	0.05	ND	ND	ND	ND	0.05
Copper	0.5	ND	ND	ND	ND	5
Iron	1.0	ND	ND	ND	ND	48
Lithium	0.1	ND	ND	ND	ND	0.6
Manganese	0.1	ND	ND	ND	ND	0.6
Zinc	1.0	ND	ND	ND	ND	5
Aluminum	0.1	ND	ND	ND	ND	1
Nickel	0.01	ND	ND	ND	ND	0.02
<b>Conclusion</b>		PASS	PASS	PASS	PASS	

Note:

mg/kg=milligram per kilogram

ND= Not Detected





**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.		2	3	4	---	---	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, 2h 3% Acetic acid	ND	ND	ND	---	---	0.05
<b>Conclusion</b>		PASS	PASS	PASS	---	---	

Note :

mg/kg = milligram per kilogram = ppm

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



**DETAILED RESULTS:****Regulation (EC) No 1935/2004 and Council of Europe Resolution CM Res(2013)9 on metals and alloys used in food contact materials and articles - Specific release of heavy metals**

Test method: Sample preparation in Artificial tap water at 70°C for 2hours, ISO 17294-2:2016

Analytical Method: Inductively Coupled Plasma-Mass Spectrometry

Specimen No:	1					
Test Item(s)	Unit	MDL	1 <sup>st</sup> + 2 <sup>nd</sup> Migration		3 <sup>rd</sup> Migration	
			Result	7xSRL <sup>*2</sup>	Result	SRL <sup>*1</sup>
Aluminum (Al)	mg/kg	0.5	ND	35	ND	5
Antimony (Sb)	mg/kg	0.01	ND	0.28	ND	0.04
Chromium (Cr)	mg/kg	0.1	ND	1.75	ND	0.25
Cobalt (Co)	mg/kg	0.01	ND	0.14	ND	0.02
Copper (Cu)	mg/kg	0.5	ND	28	ND	4
Iron (Fe)	mg/kg	5	ND	280	ND	40
Magnesium(Mg)	mg/kg	0.1	ND	---	ND	---
Manganese (Mn)	mg/kg	0.5	ND	12.6	ND	1.8
Molybdenum (Mo)	mg/kg	0.05	ND	0.84	ND	0.12
Nickel (Ni)	mg/kg	0.05	ND	0.98	ND	0.14
Silver (Ag)	mg/kg	0.05	ND	0.56	ND	0.08
Tin <sup>*3</sup> (Sn)	mg/kg	5	ND	700	ND	100
Titanium(Ti)	mg/kg	0.1	ND	---	ND	---
Vanadium (V)	mg/kg	0.005	ND	0.07	ND	0.01
Zinc (Zn)	mg/kg	0.5	ND	35	ND	5
Arsenic (As)	mg/kg	0.001	ND	0.014	ND	0.002
Barium (Ba)	mg/kg	0.1	ND	8.4	ND	1.2
Beryllium (Be)	mg/kg	0.005	ND	0.07	ND	0.01
Cadmium (Cd)	mg/kg	0.001	ND	0.035	ND	0.005
Lead (Pb)	mg/kg	0.005	ND	0.07	ND	0.01
Lithium (Li)	mg/kg	0.005	ND	0.336	ND	0.048
Mercury (Hg)	mg/kg	0.0005	ND	0.021	ND	0.003
Thallium (Tl)	mg/kg	0.00005	ND	0.0007	ND	0.0001
Conclusion	PASS					

**Note:**

(1) mg/kg =milligram per kilogram

(2) SRL = Specific Release Limit

(3) \*1 Compliance is established on the result from the third migration test for repeated used articles.

(4) \*2 Meantime, the sum of the results of the first and second tests should not exceed 7 times the SRL

(5) \*3 Except in field of application under Regulation (EC) No.1881/2006.(canned food container)



Hangzhou Asiainspection Testing Technology Co., Ltd. ♦ Email: Labtesting@qima.com ♦ Tel: (86) 571 8999 7158  
 5/F A2 Building ♦ No. 1213 Huoju South Road ♦ Puyan Street ♦ Binjiang District ♦ Hangzhou ♦ China

The test result(s) and conclusion(s) in this report relate to the sample(s) tested as described herein.

This test report may not be reproduced in whole or in part, without written approval of Hangzhou Asiainspection Testing Technology Co., Ltd



**SPECIMEN DESCRIPTION:**

Specimen No.	Specimen Description	Location
1	Silvery metal	Interior (red style)
2	Transparent plastic	Straw (red style)
3	Dark grey plastic	Lid (red style)
4	Transparent black plastic	Nozzle (red style)
5	Translucent soft plastic	Seal ring (red style)
6	Grey plastic	Handle (red style)
7	Black plastic	Bottle neck (red style)
8	Red coating	Exterior (red style)
9	White coating	Exterior (white style)
10	Blue coating	Exterior (blue style)
11	Black coating	Exterior (black style)
12	Silvery coating	Exterior (silvery style)





**SAMPLE PHOTO:**





**SAMPLE PHOTO:**



-End Report-

