



中国认可
国际互认
检测
TESTING
CNAS L6478



TEST REPORT

Reference No. : WTF20F10072681F

Applicant : Mid Ocean Brands B.V.

Address : 7/F., Kings Tower, 111 King Lam Street, Cheung Sha Wan, Kowloon, Hong Kong

Manufacturer : 114276

Sample Name : PE bottle

Model No. : MO9538

Test Requested : In accordance with Regulation (EU) No 10/2011 with amendments, Council of Europe Resolution AP (2004)4 and Regulation (EC) No 1935/2004.

Test Conclusion : **Pass** (Please refer to next pages for details)

Date of Receipt sample : 2020-10-22

Date of Test : 2020-10-22 to 2020-11-02

Date of Issue : 2020-11-02

Test Result : Please refer to next page (s)

Note : Selected test(s) as requested by applicant

Remarks:

The results shown in this test report refer only to the sample(s) tested; this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.
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**Test Results:****1. Overall Migration Test**

Food Simulant	Test Condition	Result (mg/dm ²)		LOQ (mg/dm ²)	Limit (mg/dm ²)
		No.1	No.2		
3% Acetic Acid	100°C for 2 hours	ND	ND	3	10
10% Ethanol	100°C for 2 hours	ND	ND	3	10

Note:

1. Test method: With reference to BS EN 1186-1: 2002 and BS EN 1186-3: 2002
2. "mg/dm²" = milligram per square decimetre
3. "°C" = Celsius degree
4. LOQ = Limit of quantitation
5. ND = Not Detected or lower than limit of quantitation
6. The specification was quoted from (EU) No 10/2011 and its amendments (EU) 2016/1416, (EU) 2017/752 and (EU)2019/37.

Food Simulant	Test Condition	Result (mg/kg)		LOQ(mg/kg)	Limit (mg/kg)
		No.3	No.4		
3% Acetic Acid	40°C for 24 hours	ND	ND	20	60
10% Ethanol	40°C for 24 hours	ND	ND	20	60

Note:

1. Test method: With reference to BS EN 1186-1: 2002 and BS EN 1186-3: 2002
2. "mg/kg" = milligram per kilogram
3. "°C" = Celsius degree
4. LOQ = Limit of quantitation
4. ND = Not Detected or lower than limit of quantitation
6. The specification was quoted from Council of Europe Resolution AP (2004)4.

**2. Specific Migration of heavy metal (Nickel, Aluminium, Barium, Cobalt, Copper, Iron, Lithium, Manganese, Zinc)**

Test Items	Result (mg/kg)		LOQ (mg/kg)	Limit (mg/kg)
	No.1	No.2		
Specific migration of Nickel	ND	ND	0.01	0.02
Specific migration of Aluminium	ND	ND	0.1	1
Specific migration of Barium	ND	ND	0.1	1
Specific migration of Cobalt	ND	ND	0.01	0.05
Specific migration of Copper	ND	ND	0.1	5
Specific migration of Iron	ND	ND	0.1	48
Specific migration of Lithium	ND	ND	0.01	0.6
Specific migration of Manganese	ND	ND	0.01	0.6
Specific migration of Zinc	ND	ND	0.1	5

Note:

1. Test Method: With reference to BS EN 13130-1: 2004, sample preparation in 3% acetic acid at 100°C for 6 hours, analysis was performed by ICP-OES.
2. "mg/kg" = milligram per kilogram of foodstuff in contact with
3. LOQ = Limit of quantitation
4. ND = Not Detected or lower than limit of quantitation
5. The specification was quoted from (EU) No 10/2011 and its amendments (EU) 2016/1416 and (EU) 2017/752.

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Test Items	Result (mg/kg)		LOQ (mg/kg)	Limit (mg/kg)
	No.3	No.4		
Specific migration of Nickel	ND	ND	0.01	0.02
Specific migration of Aluminium	ND	ND	0.1	1
Specific migration of Barium	ND	ND	0.1	1
Specific migration of Cobalt	ND	ND	0.01	0.05
Specific migration of Copper	ND	ND	0.1	5
Specific migration of Iron	ND	ND	0.1	48
Specific migration of Lithium	ND	ND	0.01	0.6
Specific migration of Manganese	ND	ND	0.01	0.6
Specific migration of Zinc	ND	ND	0.1	5

Note:

1. Test Method: With reference to BS EN 13130-1: 2004, sample preparation in 3% acetic acid at 40°C for 24 hours, analysis was performed by ICP-OES.
2. "mg/kg" = milligram per kilogram of foodstuff in contact with
3. LOQ = Limit of quantitation
4. ND = Not Detected or lower than limit of quantitation
5. The specification was quoted from (EU) No 10/2011 and its amendments (EU) 2016/1416 and (EU) 2017/752.

3. Bisphenol A Content*

Test Item	Result (mg/kg)				LOQ (mg/kg)	Limit (mg/kg)
	No.1	No.2	No.3	No.4		
Bisphenol A	ND	ND	ND	ND	0.1	Not Detected (<0.1mg/kg)

Note:

1. Test Method: With reference to EPA3550C:2007, analysis was performed by GC-MS.
2. "mg/kg" = milligram per kilogram
3. LOQ = Limit of quantitation
4. ND = Not Detected or lower than limit of quantitation
5. The specification was quoted from Law No 2012-1442.
6. The testing item marked with "*" does not been accredited by CNAS.

**4. Specific Migration of Primary Aromatic Amines**

Test Item	Result (mg/kg)		LOQ (mg/kg)	Limit (mg/kg)
	No.2			
Migration of Primary aromatic amines	ND		0.01	Not Detected (<0.01mg/kg)

Note:

1. Test Method: With reference to § 64 LFGB L No. 00.00-6, analysis was performed by UV-visible Spectrometer.
2. Test Condition and simulant: 3% acetic acid at 100°C for 6 hours.
3. "mg/kg" = milligram per kilogram of foodstuff in contact with
4. LOQ = Limit of quantitation
5. ND = Not Detected or lower than limit of quantitation
6. The specification was quoted from (EU) No 10/2011 and its amendments (EU) 2016/1416 and (EU) 2017/752.

Test Item	Result (mg/kg)		LOQ (mg/kg)	Limit (mg/kg)
	No.3	No.4		
Migration of Primary aromatic amines	ND	ND	0.01	Not Detected (<0.01mg/kg)

Note:

1. Test Method: With reference to § 64 LFGB L No. 00.00-6, analysis was performed by UV-visible Spectrometer.
2. Test Condition and simulant: 3% acetic acid at 40°C for 24 hours.
3. "mg/kg" = milligram per kilogram of foodstuff in contact with
4. LOQ = Limit of quantitation
5. ND = Not Detected or lower than limit of quantitation
6. The specification was quoted from (EU) No 10/2011 and its amendments (EU) 2016/1416 and (EU) 2017/752.

**5. Migration of N-Nitrosamine and N-Nitrosatable Substances***

Test Items	Result (mg/kg)	
	No.3	
	N-nitrosamines	N-nitrosatable substances
N-nitrosodimethylamine (NDMA)	<0.01	<0.1
N-nitrosodiethylamine (MDEA)	<0.01	<0.1
N-nitrosodipropylamine (NDPA)	<0.01	<0.1
N-nitrosodibutylamine (NDBA)	<0.01	<0.1
N-nitrosopiperidine (NPIP)	<0.01	<0.1
N-nitrosopyrrolidine (NPYR)	<0.01	<0.1
N-nitrosomorpholine (NMOR)	<0.01	<0.1
N-nitrosomethylphenylamine (NMPHA)	<0.01	<0.1
N-nitrosoethylphenylamine (NEPhA)	<0.01	<0.1
N-nitrosodibenzylamine (NDBzA)	<0.01	<0.1
N-nitroso-n, n-di-(7-methyloctyloctyl) amine (NDINA)	<0.01	<0.1
Sum of above N-nitrosamines and N-nitrosatable substances	<0.01	<0.1
Limit	0.01	0.1

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Test Items	Result (mg/kg)	
	No.4	
	N-nitrosamines	N-nitrosatable substances
N-nitrosodimethylamine (NDMA)	<0.01	<0.1
N-nitrosodiethylamine (MDEA)	<0.01	<0.1
N-nitrosodipropylamine (NDPA)	<0.01	<0.1
N-nitrosodibutylamine (NDBA)	<0.01	<0.1
N-nitrosopiperidine (NPIP)	<0.01	<0.1
N-nitrosopyrrolidine (NPYR)	<0.01	<0.1
N-nitrosomorpholine (NMOR)	<0.01	<0.1
N-nitrosomethylphenylamine (NMPHA)	<0.01	<0.1
N-nitrosoethylphenylamine (NEPhA)	<0.01	<0.1
N-nitrosodibenzylamine (NDBzA)	<0.01	<0.1
N-nitroso-n, n-di-(7-methyloctyloctyl) amine (NDINA)	<0.0155	<0.1
Sum of above N-nitrosamines and N-nitrosatable substances	<0.01	<0.1
Limit	0.01	0.1

Note:


1. Test method: With reference to EN 12868:2017, extraction with 3% acetic acid at 40°C for 24 hours, followed by GC-MS analysis.
2. "mg/kg" = Milligrams per kilogram
3. "<" = less than
4. The specification was quoted from Council of Europe Resolution AP(2004)4.
5. The testing item marked with "*" does not been accredited by CNAS.



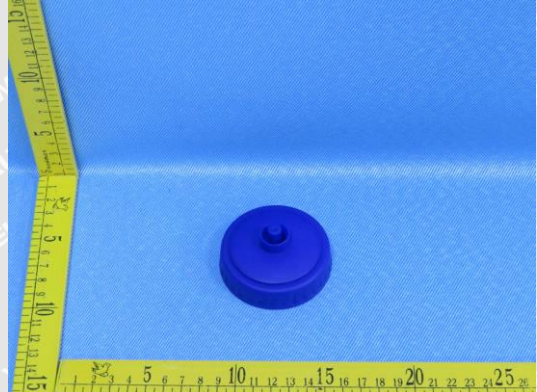
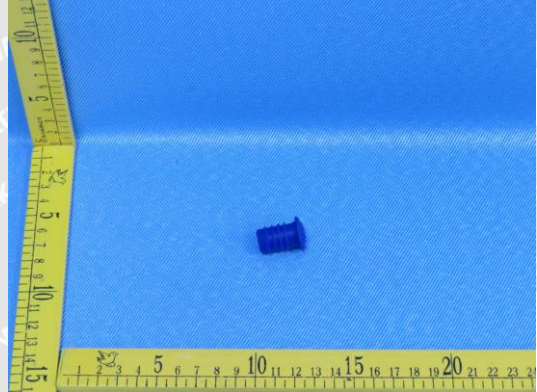
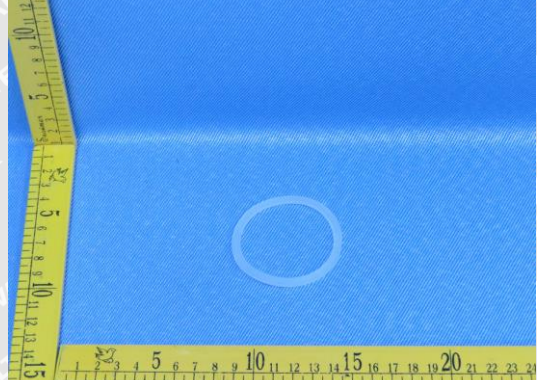
Sample Photo:



Photograph of parts tested:

No.	Photo of testing part	Parts Description	Client Claimed Material
1		White plastic	PE



No.	Photo of testing part	Parts Description	Client Claimed Material
2		Blue plastic	PP
3		White rubber	TPR
4		Transparent rubber	TPR

===== End of Report =====