

Test Report

Report No. : AGC05443221107-001

SAMPLE NAME : Double wall bottle 500ml

MODEL NAME : MO6896

APPLICANT: MID OCEAN BRANDS B.V

STANDARD(S) : Please refer to the following page(s).

DATE OF ISSUE : Nov. 23, 2022

Attestation of Global Compliance (Shenzhen) Std & Tech Co., Ltd.





Page 1 of 18

Applicant : MID OCEAN BRANDS B.V

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

Hong Kong.

Test Site : 6/F., Building 2, Sanwei Chaxi Industrial Park, Sanwei Community, Hangcheng

Street, Bao'an District, Shenzhen, Guangdong, China

Report on the submitted sample(s) said to be:

Sample Name : Double wall bottle 500ml

Model : MO6896

Vendor code : 117486

Country of Origin : CHINA

Country of Destination : EUROPE

Sample Received Date : Nov. 04, 2022

Testing Period : Nov. 04, 2022 to Nov. 23, 2022

Test Requested : Selected test(s) as requested by client.

Approved by:

Approved by:

Qinlianzhi, Reed

Liangdan, Jessie.Liang

Laboratory Supervisor

Technical Director



Page 2 of 18

Report Revise Record

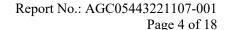
Report Version	Issued Date	Valid Version	Notes
/	Nov. 23, 2022	Valid	Initial release



Page 3 of 18

Conclusion

Annex XVII of the REACH Regulation (EC) No 1907/2006, entry 63 Pass - Lead(Pb) Content Annex XVII of the REACH Regulation (EC) No 1907/2006, entry 23 Pass -Cadmium(Cd) Content Annex XVII of the REACH Regulation (EC) No 1907/2006, entry 51&52 Pass - Phthalates Content Annex XVII of the REACH Regulation (EC) No 1907/2006, entry 50 Pass -Polycyclic-aromatic Hydrocarbons (PAHs) Content - Mechanical dishwashing safe test Regulation 1935/2004/EC, Regulation(EU) No 10/2011 and its amendment Regulation (EU) 2020/1245 and Regulation (EU) 2018/213 and Council of Europe Resolution AP(2004)5 - Overall Migration Pass - Specific migration of Bisphenol A(BPA) Pass - Bisphenol A(BPA) content Pass - Specific migration of Primary aromatic amines Pass - Specific migration of Heavy metals Pass DM-4B-COM-003-v01 -Volatile Organic Matter Pass - Peroxide value Pass - Specific Migration of Organotin (measured as Tin) Pass As specified by client, the following items are determined in the submitted sample with reference to Regulation 1935/2004/EC and Technical Guide on Metals and alloys used in food contact materials of Council of Europe Resolution CM/Res(2013)9 - Specific migration of Heavy metal Pass





The photo of the sample



The photo of AGC is for use only with the original report.

Test Point Description

Test point	Test point description
1-1	Silver outer lid in 201 stainless steel+Bottle outer in white 201 stainless steel+Silver handle in 201 stainless steel
1-2	Black inner lid in PP
1-3	Transparent silicone rubber ring
1-4	Bottle inner in silver 304 stainless steel



Page 5 of 18

Note: N.D.=Not Detected (less than method detection limit), MDL = Method Detection Limit

%= percentage (W/W), mg/kg = milligram per kilogram, mg/dm²= milligrams per decimeter squared

 \triangle = As specified by client, the submitted samples were mixed to test.

Test result of Mechanical dishwashing safe test was resubmitted sample on Nov.17, 2022.

Annex XVII of the REACH Regulation (EC) No 1907/2006, entry 63

- Lead(Pb) Content

Test Methods and Equipment: IEC 62321-5:2013; ICP-OES

T (I)	Unit Limit	MDI	Test Result(s)		
Test Item(s)		Limit	MDL	1-1△	1-2
Lead(Pb)	mg/kg	500	10	N.D.	N.D.
Con	Conformity	Conformity			

Tast Itam(s)	Linit	Unit Limit	MDL	Test Result(s)	
Test Item(s)	Ollit Lii	LIIIII		1-3	1-4
Lead(Pb)	mg/kg	500	10	N.D.	N.D.
Co	Conformity	Conformity			

Annex XVII of the REACH Regulation (EC) No 1907/2006, entry 23

-Cadmium(Cd) Content

Test Methods and Equipment: IEC 62321-5:2013; ICP-OES

Test Item(s)	I Inde	Unit Limit		Test Result(s)	
Test Item(s)	Unit	Limit	MDL	1-2	1-3
Cadmium(Cd)	mg/kg	100	10	N.D.	N.D.
Co	Conformity	Conformity			



Page 6 of 18

Annex XVII of the REACH Regulation (EC) No 1907/2006, entry 51&52

- Phthalates Content

Test Methods and Equipment: EN 14372:2004; GC-MS

Test Item(s)	Unit	Limit	MDL	Test Result(s)	
Test Item(s)	Unit	Limit	MDL	1-2	1-3
Diisobutyl phthalate (DIBP) CAS:84-69-5	%	0.1	0.01	N.D.	N.D.
Dibutyl phthalate (DBP) CAS:84-74-2	%	0.1	0.01	N.D.	N.D.
Butylbenzyl phthalate (BBP) CAS:85-68-7	%	0.1	0.01	N.D.	N.D.
Di-(2-ethylhexyl) Phthalate (DEHP) CAS:117-81-7	%	0.1	0.01	N.D.	N.D.
Di-n-octyl phthalate (DNOP) CAS:117-84-0	%	/	0.01	N.D.	N.D.
Di-isononyl phthalate (DINP) CAS:28553-12-0, 68515-48-0	%	/	0.01	N.D.	N.D.
Di-isodecyl phthalate(DIDP) CAS:26761-40-0, 68515-49-1	%	/	0.01	N.D.	N.D.
Sum of DIBP +DBP+BBP+DEHP	%	0.1	/	N.D.	N.D.
Sum of DNOP+DINP+DIDP	%	0.1	/	N.D.	N.D.
Cor	Conformity	Conformity			

Limit requirements of Phthalates

Toys and childcare articles	Each of DEHP, DBP, BBP, DIBP is less than 0.1% or the sum of DEHP+DBP+BBP+DIBP is less than 0.1%
Toys and childcare articles which can be placed in the mouth by children	DINP, DIDP, DNOP each less than 0.1%



Page 7 of 18

Annex XVII of the REACH Regulation (EC) No 1907/2006, entry 50

-Polycyclic-aromatic Hydrocarbons (PAHs) Content

Test Methods and Equipment: Afps GS 2019:01 PAK; GC-MS

Tost Itam(s)	Unit Li	Limit	MDL	Test Result(s)	
Test Item(s)	Unit	LIIIII	MIDL	1-2	1-3
Benzo[a]pyrene(BaP)	mg/kg	1	0.1	N.D.	N.D.
Benzo[e]pyrene(BeP)	mg/kg	1	0.1	N.D.	N.D.
Benzo[a]anthracene(BaA)	mg/kg	1	0.1	N.D.	N.D.
Benzo[b]fluoranthene(BbF)	mg/kg	1	0.1	N.D.	N.D.
Benzo[j]fluoranthene(BjFA)	mg/kg	1	0.1	N.D.	N.D.
Benzo[k]fluoranthene(BkF)	mg/kg	1	0.1	N.D.	N.D.
Chrysene(CHR)	mg/kg	1	0.1	N.D.	N.D.
Dibenzo[a,h]anthracene(DBA)	mg/kg	1	0.1	N.D.	N.D.
Co	Conformity	Conformity			

Limit requirements of Polycyclic-aromatic Hydrocarbons (PAHs) (Unit: mg/kg)

Items	CAS No.	Extender oils or used for the production of tyres or parts of tyres	Any of their rubber or plastic components that come into direct as well as prolonged or short-term repetitive contact with the human skin or the oral cavity	Toys, including activity toys, and childcare articles, any of their rubber or plastic components that come into direct as well as prolonged or short-term repetitive contact with the human skin or the oral cavity
Benzo[a]pyrene(BaP)	50-32-8	≤1	≤ 1	≤ 0.5
Benzo[e]pyrene(BeP)	192-97-2	/	≤ 1	≤ 0.5
Benzo[a]anthracene(BaA)	56-55-3	/	≤ 1	≤ 0.5
Benzo[b]fluoranthene(BbF)	205-99-2	/	≤ 1	≤ 0.5
Benzo[j]fluoranthene(BjFA)	205-82-3	/	≤ 1	≤ 0.5
Benzo[k]fluoranthene(BkF)	207-08-9	/	≤ 1	≤ 0.5
Chrysene(CHR)	218-01-9	/	≤ 1	≤ 0.5
Dibenzo[a,h]anthracene(DBA)	53-70-3	/	≤ 1	≤ 0.5
Sum of BaP+ BeP+ BaA+ BbF+ BjFA+ BkF+ CHR+ DBA	/	≤ 10	/	/



- Mechanical dishwashing safe test

Test method: BS EN 12875-1:2005

Washing temperature: 60°C Number of cycle: Ten (10) cycles

Number of tested sample: 1 (One) pc(s). Number of control sample: 1 (One) pc(s).

For all tested metal articles:

- 1) No visible change of color, gloss and clouding was found on the tested samples after wash.
- No visible deposit or iridescent layer was found on the tested samples after wash.
- 3) No visible swelling, deformation, cracking, crazing or delamination was found on the tested samples after wash.

Report No.: AGC05443221107-001

Page 8 of 18

- Overall Migration

		Test	result	
Test point		Overall migra	Conclusion	
		3% Acetic acid, 70°C,2h	50% Ethanol, 70°C,2h	
	1 st migration	N.D.	N.D.	
1-2	2 nd migration	N.D.	N.D.	Conformity
	3 rd migration	N.D.	N.D.	
I	Limit	10	10	/
I	MDL	5	5	/

	Test I		
Test point	Overall migra	Conclusion	
-	3% Acetic acid, 70°C,2h	50% Ethanol, 70°C,2h	
1-3	N.D.	N.D.	Conformity
Limit	10	10	/
MDL	5	5	/



Page 9 of 18

- Specific migration of Bisphenol A(BPA)

	Test Result	
Test point	Specific migration of Bisphenol A(BPA)/ (mg/kg)	Conclusion
	3% Acetic acid, 70°C,2h	
1-3	N.D.	Conformity
Limit (Client's Requirement)	0.05	/
MDL	0.02	/

- Bisphenol A(BPA) content

Test Item	Bisphenol A (BPA)			
Limit (mg/kg)	Prohibited			
MDL(mg/kg)	1			
Test Method/Instrument	EPA 3540C:1996& EPA 8321B:2007/ LC-MS-MS			

Tost point	Test Result (mg/kg) Test point	
Test point	Bisphenol A (BPA)	Conclusion
1-2	N.D.	Conformity

Test Item	Bisphenol A (BPA)				
Limit(Client's Requirement) (mg/kg)	Prohibited				
MDL(mg/kg)	1				
Test Method/Instrument	EPA 3540C:1996& EPA 8321B:2007/ LC-MS-MS				

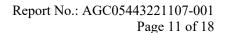
Test point	Test Result (mg/kg)	Conclusion
Test point	Bisphenol A (BPA)	Conclusion
1-3	N.D.	Conformity



Specific migration of Primary aromatic amines

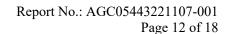
Report No.: AGC05443221107-001 Page 10 of 18

Test Item(s)	MDL (mg/kg)	Limit (mg/kg)	
4-Aminobiphenyl	0.002	N.D.	
Benzidine	0.002	N.D.	
4-Chloro-o-Toluidine	0.002	N.D.	
2-Naphthylamine	0.002	N.D.	
4-amino-2',3-dimethylazobenzene	0.002	N.D.	
5-Nitro-o-toluidine	0.002	N.D.	
4-Chloroaniline	0.002	N.D.	
4-Methoxy-m-phenylenediamine	0.002	N.D.	
4,4'-Diaminodiphenylmethane	0.002	N.D.	
3,3'-Dichlorobenzidine	0.002	N.D.	
3,3'-Dimethoxybenzidine	0.002	N.D.	
3,3'-Dimethybenzidine	0.002	N.D.	
4,4'-Methylenedi-o-toluidine	0.002	N.D.	
6-methoxy-m-toluidine	0.002	N.D.	
4,4'-methylenebis[2-chloroaniline]	0.002	N.D.	
4,4'-Oxydianiline	0.002	N.D.	
4,4'-Thiodianiline	0.002	N.D.	
2-Aminotoluene	0.002	N.D.	
4-methyl-m-phenylenediamine	0.002	N.D.	
2,4,5-Trimethylaniline	0.002	N.D.	
2-Methoxyaniline	0.002	N.D.	
4-Aminoazobenzene	0.002	N.D.	
1,3 phenylenediamine	0.002	N.D.	
Total of other primary aromatic amines	0.01	0.01	





	Test Result (mg/kg)	
Test Item(s)	1-2	
	3% Acetic acid 70°C, 2h	
4-Aminobiphenyl	N.D.	
Benzidine	N.D.	
4-Chloro-o-Toluidine	N.D.	
2-Naphthylamine	N.D.	
4-amino-2',3-dimethylazobenzene	N.D.	
5-Nitro-o-toluidine	N.D.	
4-Chloroaniline	N.D.	
4-Methoxy-m-phenylenediamine	N.D.	
4,4'-Diaminodiphenylmethane	N.D.	
3,3'-Dichlorobenzidine	N.D.	
3,3'-Dimethoxybenzidine	N.D.	
3,3'-Dimethybenzidine	N.D.	
4,4'-Methylenedi-o-toluidine	N.D.	
6-methoxy-m-toluidine	N.D.	
4,4'-methylenebis[2-chloroaniline]	N.D.	
4,4'-Oxydianiline	N.D.	
4,4'-Thiodianiline	N.D.	
2-Aminotoluene	N.D.	
4-methyl-m-phenylenediamine	N.D.	
2,4,5-Trimethylaniline	N.D.	
2-Methoxyaniline	N.D.	
4-Aminoazobenzene	N.D.	
1,3 phenylenediamine	N.D.	
Total of other primary aromatic amines	N.D.	
Conclusion	Conformity	





-Specific migration of Heavy metals

Test Item(s)	Test condition/ Equipment		Test Result(s) (mg/kg)			Limit (mg/kg)
		MDL (mg/kg)	1-2			
	Equipment	(g,g)	1 st migration	2 nd migration	3 rd migration	(g,g)
Barium (Ba)		0.1	N.D.	N.D.	N.D.	1
Cobalt (Co)		0.01	N.D.	N.D.	N.D.	0.05
Copper (Cu)		0.25	N.D.	N.D.	N.D.	5
Iron (Fe)		0.25	N.D.	N.D.	N.D.	48
Lithium (Li)		0.1	N.D.	N.D.	N.D.	0.6
Manganese (Mn)		0.1	N.D.	N.D.	N.D.	0.6
Zinc (Zn)		0.25	N.D.	N.D.	N.D.	5
Aluminum (Al)		0.1	N.D.	N.D.	N.D.	1
Europium (Eu)		0.01	N.D.	N.D.	N.D.	/
Gadolinium (Gd)		0.01	N.D.	N.D.	N.D.	/
Lanthanum (La)		0.01	N.D.	N.D.	N.D.	/
Terbium (Tb)		0.01	N.D.	N.D.	N.D.	/
Sum(Eu+Gd+La+Tb)	3% Acetic acid/	/	N.D.	N.D.	N.D.	0.05
Antimony (Sb)	70°C, 2h/ ICP-OES/ IC	0.01	N.D.	N.D.	N.D.	0.04
Arsenic (As)		0.01	N.D.	N.D.	N.D.	N.D.
Cadmium (Cd)		0.002	N.D.	N.D.	N.D.	N.D.
Chromium (Cr)		0.01	N.D.	N.D.	N.D.	N.D.
Lead (Pb)		0.01	N.D.	N.D.	N.D.	N.D.
Mercury (Hg)		0.01	N.D.	N.D.	N.D.	N.D.
Nickel (Ni)		0.01	N.D.	N.D.	N.D.	0.02
Conclusion		/		Conformity		/
Ammonium (NH ₄ ⁺)		0.10	N.D.	N.D.	N.D.	/
Calcium (Ca)		0.01	0.425	0.153	0.123	/
Magnesium (Mg)		0.01	N.D.	N.D.	N.D.	/
Potassium (K)		0.01	0.030	N.D.	N.D.	/
Sodium (Na)		0.01	0.059	0.025	0.025	/



Page 13 of 18

Unit: %

Test item(s)	Test Condition	MDL	Result(s)	Limit
Volatile Organic Matter		0.1	0.3	0.5
Conclusion	200°C, 4h	/	Conformity	/

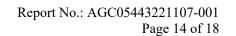
- Peroxide value

Unit: %

Test Item	MDL	Result(s) 1-3	Limit
Peroxide value	0.2	N.D.	Absent
Conclusion	/	Conformity	/

- Specific Migration of Organotin (measured as Tin)

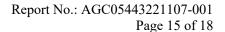
	Test Result	
Test point	Specific Migration of Organotin (measured as Tin)/ (mg/kg)	Conclusion
	3% Acetic acid, 70°C,2h	
1-3	N.D.	Conformity
Limit	0.1	/
MDL	0.01	/





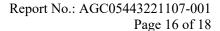
-Specific migration of Heavy metals

Test Item(s)	Test condition/	MDL	Test Result(s) (mg/kg)	Limit (mg/kg)
	Equipment	(mg/kg)	1-4	
			1st + 2nd extractives	
Barium (Ba)		0.1	N.D.	8.4
Copper (Cu)		0.1	N.D.	28
Iron (Fe)		0.1	N.D.	280
Tin (Sn)		0.1	N.D.	700
Chromium (Cr)		0.01	N.D.	1.75
Manganese (Mn)		0.1	N.D.	12.6
Zinc (Zn)		0.1	N.D.	35
Aluminium (Al)		0.1	N.D.	35
Lithium (Li)		0.01	N.D.	0.336
Beryllium (Be)		0.005	N.D.	0.07
Vanadium (V)	Artificial tap water,	0.005	N.D.	0.07
Nickel (Ni)	70°C, 2h, ICP-OES	0.01	N.D.	0.98
Cobalt (Co)		0.01	N.D.	0.14
Arsenic (As)		0.002	N.D.	0.014
Molybdenum(Mo)		0.01	N.D.	0.84
Silver (Ag)		0.01	N.D.	0.56
Cadmium (Cd)		0.002	N.D.	0.035
Antimony (Sb)		0.01	N.D.	0.28
Mercury (Hg)		0.002	N.D.	0.021
Thallium (Tl)		0.0001	N.D.	0.0007
Lead (Pb)		0.01	N.D.	0.07
Conclusion		/	Conformity	/



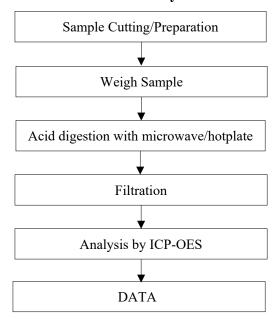


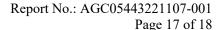
Test Item(s)	Test condition/ Equipment	MDL (mg/kg)	Test Result(s) (mg/kg) 1-4	Limit (mg/kg)
		(8 8)	3 rd extractives	
Barium (Ba)		0.1	N.D.	1.2
Copper (Cu)		0.1	N.D.	4
Iron (Fe)		0.1	N.D.	40
Tin (Sn)		0.1	N.D.	100
Chromium (Cr)		0.01	N.D.	0.25
Manganese (Mn)		0.1	N.D.	1.8
Zinc (Zn)		0.1	N.D.	5
Aluminium (Al)		0.1	N.D.	5
Lithium (Li)		0.01	N.D.	0.048
Beryllium (Be)		0.005	N.D.	0.01
Vanadium (V)	Artificial tap water,	0.005	N.D.	0.01
Nickel (Ni)	70°C, 2h, ICP-OES	0.01	N.D.	0.14
Cobalt (Co)		0.01	N.D.	0.02
Arsenic (As)		0.002	N.D.	0.002
Molybdenum(Mo)		0.01	N.D.	0.12
Silver (Ag)		0.01	N.D.	0.08
Cadmium (Cd)		0.002	N.D.	0.005
Antimony (Sb)		0.01	N.D.	0.04
Mercury (Hg)		0.002	N.D.	0.003
Thallium (Tl)		0.0001	N.D.	0.0001
Lead (Pb)		0.01	N.D.	0.01
Conclusion		/	Conformity	/





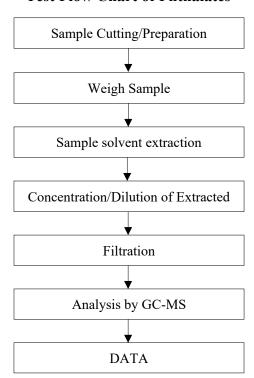
Test Flow Chart of Heavy Metal Content

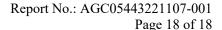






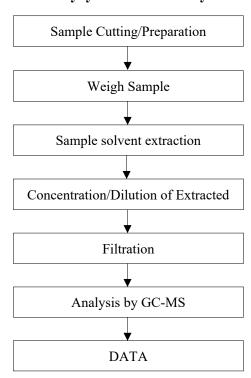
Test Flow Chart of Phthalates







Test Flow Chart of Polycyclic-aromatic Hydrocarbons (PAHs)





Conditions of Issuance of Test Reports

- 1. All samples and goods are accepted by the Attestation of Global Compliance (Shenzhen) Std & Tech Co., Ltd. (the "Company") solely for testing and reporting in accordance with the following terms and conditions. The company provides its services on the basis that such terms and conditions constitute express agreement between the company and any person, firm or company requesting its services (the "Clients").
- 2. Any report issued by Company as a result of this application for testing services (the "Report") shall be issued in confidence to the Clients and the Report will be strictly treated as such by the Company. It may not be reproduced either in its entirety or in part and it may not be used for advertising or other unauthorized purposes without the written consent of the Company. The Clients to whom the Report is issued may, however, show or send it, or a certified copy thereof prepared by the Company to its customer, supplier or other persons directly concerned. The Company will not, without the consent of the Clients, enter into any discussion or correspondence with any third party concerning the contents of the Report, unless required by the relevant governmental authorities, laws or court orders.
- 3. The Company shall not be called or be liable to be called to give evidence or testimony on the Report in a court of law without its prior written consent, unless required by the relevant governmental authorities, laws or court orders.
- 4. In the event of the improper use of the report as determined by the Company, the Company reserves the right to withdraw it, and to adopt any other additional remedies which may be appropriate.
- 5. Samples submitted for testing are accepted on the understanding that the Report issued cannot form the basis of, or be the instrument for, any legal action against the Company.
- 6. The Company will not be liable for or accept responsibility for any loss or damage however arising from the use of information contained in any of its Reports or in any communication whatsoever about its said tests or investigations.
- 7. Clients wishing to use the Report in court proceedings or arbitration shall inform the Company to that effect prior to submitting the sample for testing.
- 8. The Company is not responsible for recalling the electronic version of the original report when any revision is made to them. The Client assumes the responsibility to providing the revised version to any interested party who uses them.
- 9. Subject to the variable length of retention time for test data and report stored hereinto as otherwise specifically required by individual accreditation authorities, the Company will only keep the supporting test data and information of the test report for a period of six years. The data and information will be disposed of after the aforementioned retention period has elapsed. Under no circumstances shall we provide any data and information which has been disposed of after retention period. Under no circumstances shall we be liable for damage of any kind, including (but not limited to) compensatory damages, lost profits, lost data, or any form of special, incidental, indirect, consequential or punitive damages of any kind, whether based on breach of contract of warranty, tort (including negligence), product liability or otherwise, even if we are informed in advance of the possibility of such damages.

*** End of Report ***