

Test Report

Report No. : AGC05443230822-001

SAMPLE NAME : Double wall vacuum bottle

MODEL NAME : MO9431

APPLICANT: MID OCEAN BRANDS B.V

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

DATE OF ISSUE : Sep. 08, 2023

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





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 vacuum bottle

Model : MO9431

Vendor code : 115253

Country of Origin : CHINA

Country of Destination : EUROPE

Sample Received Date : Aug. 31, 2023

Testing Period : Aug. 31, 2023 to Sep. 08, 2023

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

Approved by : Jessie liang

Report No.: AGC05443230822-001

Liangdan, Jessie.Liang

Technical Director



Conclusion

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

- Lead(Pb) Content

Pass

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

-Cadmium(Cd) Content

Pass

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

- Phthalates Content

Pass

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

- Polycyclic-aromatic Hydrocarbons (PAHs) Content

Pass

Regulation (EU) 2019/1021 on persistent organic pollutants (POPs)

- Pentachlorophenol (PCP) Content

Pass

- Formaldehyde Release

Pass

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 MigrationBisphenol A(BPA) content

Pass Pass

Bisphenol A(BPA) content
 Specific migration of Bisphenol A(BPA)

Pass

DM-4B-COM-003-v01 for:

-Volatile Organic Matter

Pass

Peroxide valueSpecific Migration of Organotin (measured as Tin)

Pass Pass

Regulation (EC) No 1935/2004, LFGB section 30 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 from metal and alloys used in contact with food

Pass



Report Revise Record

Report No.: AGC05443230	822-001
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Report Version	Issued Date	Valid Version	Notes
/	Sep. 08, 2023	Valid	Initial release



The photo of the sample

The photo of AGC05443230822-001 is for use only with the original report.

Test Point Description

Test point	Test point description
1-1	Orange coating+Navy coating
1-2	Transparent silicone sealing
1-3	Metal cup body
1-4	Metal cup cover
1-5	Metal handle
1-6	Wooden cover



Note: N.D.=Not Detected (less than method detection limit), MDL = Method Detection Limit, 1mg/kg=0.0001%

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

Tost Itam(s)	Unit	Limit	MDL	Test Result(s)		
Test Item(s)	Onit	Limit	MDL	1-1	1-2	1-3
Lead(Pb)	mg/kg	500	10	N.D.	N.D.	25
Conclusion				Conformity	Conformity	Conformity

Test Item(s)	Unit	Limit	MDL	Test Result(s)		
Test Itelli(s)	Omi	Lillit	MIDL	1-4	1-5	1-6
Lead(Pb)	mg/kg	500	10	N.D.	N.D.	N.D.
Conclusion				Conformity	Conformity	Conformity

Remark:

1. As specified by client, the submitted samples were mixed to test, the test points: 1-1

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)	Unit	Limit	MDL	Test Result(s)		
rest tiem(s)	Onit	Lillit	MDL	1-1	1-2	
Cadmium(Cd)	mg/kg	100	10	N.D.	N.D.	
Co	Conformity	Conformity				

Remark:

1. As specified by client, the submitted samples were mixed to test, the test points: 1-1

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

- Phthalates Content

Test Methods and Equipment: IEC 62321-8:2017; GC-MS

Test Item(s)	Unit	T ::4	MDL	Test Result(s)	
Test Item(s)	Omi	Limit	MIDL	1-1	1-2
Diisobutyl phthalate (DIBP) CAS:84-69-5	%	0.1	0.005	N.D.	N.D.
Dibutyl phthalate (DBP) CAS:84-74-2	%	0.1	0.005	N.D.	N.D.



Tast Itam(s)	Unit	Limit	MDL	Test Result(s)	
Test Item(s)	Olit Lillit NIDL		1-1	1-2	
Butylbenzyl phthalate (BBP) CAS:85-68-7	%	0.1	0.005	N.D.	N.D.
Di-(2-ethylhexyl) Phthalate (DEHP) CAS:117-81-7	%	0.1	0.005	N.D.	N.D.
Di-n-octyl phthalate (DNOP) CAS:117-84-0	%	/	0.005	N.D.	N.D.
Di-isononyl phthalate (DINP) CAS:28553-12-0, 68515-48-0	%	/	0.005	N.D.	N.D.
Di-isodecyl phthalate(DIDP) CAS:26761-40-0, 68515-49-1	%	/	0.005	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.
Con	Conformity	Conformity			

Remark:

1. As specified by client, the submitted samples were mixed to test, the test points: 1-1

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	The sum of DINP+DIDP+DNOP is less than 0.1%

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

Test Item(s)	Unit	Limit	MDL	Test Result(s)	
rest item(s)	Cilit			1-1	1-2
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			

Remark:

1. As specified by client, the submitted samples were mixed to test, the test points: 1-1



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

			, , , , , , , , , , , , , , , , , , ,	<u> </u>
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	/	/

Regulation (EU) 2019/1021 on persistent organic pollutants (POPs)

- Pentachlorophenol (PCP) Content

Test Methods and Equipment: EPA 3550C:2007 & EPA 8270E:2018; GC-MS

Test Item(s)	Unit	Limit	MDL	Test Result(s)
Test Item(s)	Unit	Liiiit	MDL	1-6
Pentachlorophenol (PCP)	mg/kg	5	5	N.D.
Co	Conformity			

- Formaldehyde Release

Test Methods and Equipment: EN 717-3:1996; UV-Vis

Tost Itom(s)	I Init	Client's	MDL	Test Result(s)
Test Item(s)	Unit	limit	MDL	1-6
Formaldehyde Release	mg/kg	80	1	6
Со	Conformity			



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

	Test I		
Test point	Test point Overall migration/ (mg/dm²)		Conclusion
_	3% Acetic acid, 70°C,2h	50% Ethanol, 70°C,2h	
1-2	N.D.	N.D.	Conformity
Limit	10	10	/
MDL	5	5	/

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:

- Bisphenol A(BPA) content

Test Item	Bisphenol A (BPA)		
Limit(Client's Requirement) (mg/kg)	Prohibited		
MDL(mg/kg)	0.1		
Test Method/Instrument	EPA 3540C:1996& EPA 8321B:2007/ LC-MS-MS		

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

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:

- Specific migration of Bisphenol A(BPA)

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



DM-4B-COM-003-v01 for:

- Volatile Organic Matter

Unit: %

Test item(s)	Test Condition MDL	MDI	Result(s)	Limit
		MIDL	1-2	Lillit
Volatile Organic Matter	200°C, 4h	0.1	N.D.	0.5
Conclusion		/	Conformity	/

DM-4B-COM-003-v01 for:

- Peroxide value

Unit: %

Test Item	MDL	Result(s) 1-2	Limit
Peroxide value	0.2	N.D.	Absent
Conclusion	/	Conformity	/

DM-4B-COM-003-v01 for:

- 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	
1-2	N.D.	Conformity
Limit	0.1	/
MDL	0.01	/



Regulation (EC) No 1935/2004, LFGB section 30 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 from metal and alloys used in contact with food

Test Method: With reference to EDQM Technical Guide on Metals and alloys used in food contact materials 2013.

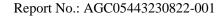
Unit: mg/kg

		MDL	Test Result(s)	Limit
Test Item(s)	Test condition/ Equipment		1st + 2nd extractives	
	Equipment		1-3	
Barium (Ba)		0.1	0.113	8.4
Copper (Cu)		0.1	N.D.	28
Iron (Fe)		0.1	0.935	280
Tin (Sn)		0.1	N.D.	700
Chromium (Cr)		0.01	0.040	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)	0.5% citric acid,	0.005	N.D.	0.07
Nickel (Ni)	70℃, 2h ICP-OES	0.01	0.012	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	/



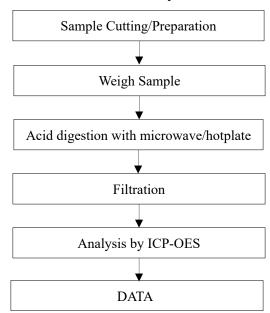
Unit: mg/kg

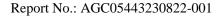
Test Item(s)		MDL	Test Result(s)	
	Test condition/ Equipment		3 rd extractives	Limit
	Equipment		1-3	
Barium (Ba)		0.1	N.D.	1.2
Copper (Cu)		0.1	N.D.	4
Iron (Fe)		0.1	N.D.	40
Tin (Sn)		0.1	N.D.	100
Chromium (Cr)		0.01	N.D.	0.25
Manganese (Mn)		0.1	N.D.	1.8
Zinc (Zn)		0.1	N.D.	5
Aluminium (Al)		0.1	N.D.	5
Lithium (Li)		0.01	N.D.	0.048
Beryllium (Be)		0.005	N.D.	0.01
Vanadium (V)	0.5% citric acid, 70°C, 2h	0.005	N.D.	0.01
Nickel (Ni)	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	/





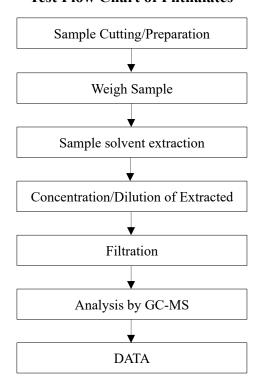
Test Flow Chart of Heavy Metal Content

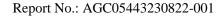






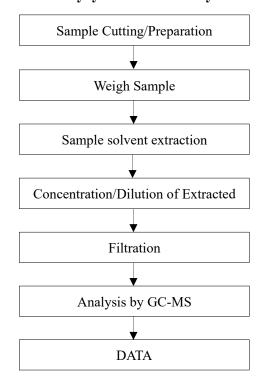
Test Flow Chart of Phthalates

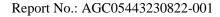






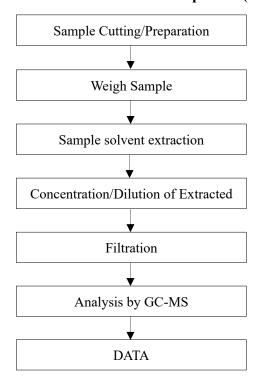
Test Flow Chart of Polycyclic-aromatic Hydrocarbons (PAHs)

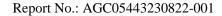






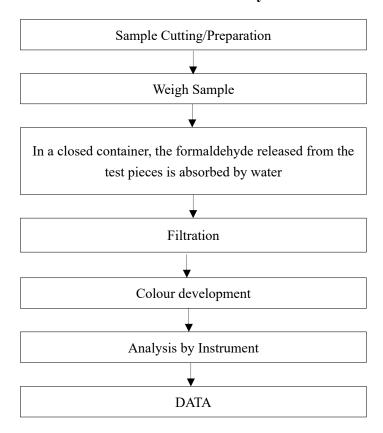
Test Flow Chart of Pentachlorophenol (PCP)







Test Flow Chart of Formaldehyde Release





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- 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 ***