

Test Report

Report No. : AGC05443250434-001

SAMPLE NAME : CX1523 Double wall borosilicate mug

CX1524 Double wall borosilicate mug

MODEL NAME : CX1523 CX1524

APPLICANT: MID OCEAN BRANDS B.V.

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

DATE OF ISSUE : May 14, 2025

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 : 5,6/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 : CX1523 Double wall borosilicate mug

CX1524 Double wall borosilicate mug

Model : CX1523

CX1524

Vendor code : 114276
Country of Origin : CHINA
Country of Destination : EUROPE
Sample receiving state : Normal

Sample Received Date : Apr. 25, 2025

Testing Period : Apr. 25, 2025 to May 14, 2025

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

Approved by: Len

Suhongliang, Leon

Report No.: AGC05443250434-001

Technical Director



Conclusion

Microwave heating resistance test

Pass

Mechanical dishwashing safe test

Pass

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

Pass

- Polycyclic-aromatic Hydrocarbons (PAHs) Content

Regulation 1935/2004/EC, Council Directive 84/500/EEC - Migration of Lead and Cadmium

Pass

German Food, Articles of Daily Use and Feed Code of September, 2005(LFGB), Section 30 and BfR Recommendations, Regulation 1935/2004/EC, Council of Europe Resolution AP (2002)2

Pass

- Specific migration of Formaldehyde

German Food, Articles of Daily Use and Feed Code of September, 2005(LFGB), Section 30 and BfR Recommendations, Regulation 1935/2004/EC, Council of Europe Resolution AP (2002)2

Pass

- Pentachlorophenol(PCP) content

German Food, Articles of Daily Use and Feed Code of September, 2005(LFGB), Section 30 and BfR Recommendations, Regulation 1935/2004/EC, Council of Europe Resolution AP (2004)5 and Regulation (EU) 2024/3190

Pass

- Bisphenol A (BPA) content

German Food, Articles of Daily Use and Feed Code of September, 2005(LFGB), Section 30 and BfR Recommendations, Regulation 1935/2004/EC, Council of Europe Resolution AP (2004)5 - Volatile Organic Components (VOC) content

Pass

German Food, Articles of Daily Use and Feed Code of September, 2005(LFGB), Section 30 and BfR Recommendations, Regulation 1935/2004/EC, Council of Europe Resolution AP (2004)5 - Peroxides

Pass

German Food, Articles of Daily Use and Feed Code of September, 2005(LFGB), Section 30 and BfR Recommendations, Regulation 1935/2004/EC, Council of Europe Resolution AP (2004)5

Pass

- Overall Migration

German Food, Articles of Daily Use and Feed Code of September, 2005(LFGB), Section 30 and BfR Recommendations, Regulation 1935/2004/EC, Council of Europe Resolution AP (2004)5 - Specific migration of Bisphenol A (BPA)

Pass

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

- Specific Migration of Organotin (measured as Tin)

Pass



Report Revise Record

Report Version	Issued Date	Valid Version	Notes
/	May 14, 2025	Valid	Initial release



The photo of the sample





The photo of AGC05443250434-001 is for use only with the original report.

Test Point Description

Test point	Test point description
1-1	Star glass mug
1-2	Bamboo lid
1-3	White silicone sealing



Note: N.D.=Not Detected (less than method detection limit), MDL = Method Detection Limit, 1mg/kg=0.0001% Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule (w=0) stated in ILAC-G8:09/2019/CNAS-GL015:2022.

Microwave heating resistance test

Test Result of microwave test

Sample No.: CX1523 CX1524 1-1 Test method: Refer BS EN 15284 :007

Microwave power out: 800 W

Short period: 90 s Long period: 585 s

Number of tested sample: 2 pc(s) Number of control sample: 1 pc(s)

Specimen(s)	Maximum handle temperature after short period of heating	Maximum surface temperature after long period of heating
1	39.7℃	89.1°C
2	38.7°C	89.7°C

For all tested glass, glass-ceramic articles:

No visible change of color was found on the tested samples after test.

No visible cracking, crazing, scaling was found on the tested samples after test.

Mechanical dishwashing safe test

Test Result of mechanical dishwashing safe test:

Requirements:For dishwasher safe test, if there is no noticeable change in appearance (e.g. color, size and shape) and function, it should be "PASS"

Sample No.: CX1523 CX1524 1-1 Test method: Refer BS EN 12875 -1-2005

Washing temperature: 60°C Number of cycle: 10 cycles

Number of tested sample: 2 pc(s). Number of control sample: 1 pc(s).

For all tested glass articles:

No visible change of color and gloss was found on the tested samples after wash. No visible deposit or iridescent layer was found on the tested samples after wash.

No cloud texture was found on the tested samples after wash.

No decoration was detached after wash.



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 Itom(s)	Unit Limit		MDL	Test Result(s)		
Test Item(s)	Unit	Lillit	MDL	1-2	1-3	
Lead(Pb)	mg/kg	500	10	N.D.	N.D.	
Con	Conformity	Conformity				

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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)
	Omi	Lillit	MDL	1-3
Cadmium(Cd)	mg/kg	100	10	N.D.
Со	Conformity			

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	Limit	MDL	Test Result(s) 1-3
Diisobutyl phthalate (DIBP) CAS:84-69-5	%	0.1	0.005	N.D.
Dibutyl phthalate (DBP) CAS:84-74-2	%	0.1	0.005	N.D.
Butylbenzyl phthalate (BBP) CAS:85-68-7	%	0.1	0.005	N.D.
Di-(2-ethylhexyl) Phthalate (DEHP) CAS:117-81-7	%	0.1	0.005	N.D.
Di-n-octyl phthalate (DNOP) CAS:117-84-0	%	/	0.005	N.D.
Di-isononyl phthalate (DINP) CAS:28553-12-0, 68515-48-0	%	/	0.005	N.D.
Di-isodecyl phthalate(DIDP) CAS:26761-40-0, 68515-49-1	%	/	0.005	N.D.
Sum of DIBP +DBP+BBP+DEHP	%	0.1	/	N.D.
Sum of DNOP+DINP+DIDP	%	0.1	/	N.D.
C	onclusion			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	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) 1-3
D [-] (D - D)	/1	1	0.1	
Benzo[a]pyrene(BaP)	mg/kg	1	0.1	N.D.
Benzo[e]pyrene(BeP)	mg/kg	1	0.1	N.D.
Benzo[a]anthracene(BaA)	mg/kg	1	0.1	N.D.
Benzo[b]fluoranthene(BbF)	mg/kg	1	0.1	N.D.
Benzo[j]fluoranthene(BjFA)	mg/kg	1	0.1	N.D.
Benzo[k]fluoranthene(BkF)	mg/kg	1	0.1	N.D.
Chrysene(CHR)	mg/kg	1	0.1	N.D.
Dibenzo[a,h]anthracene(DBA)	mg/kg	1	0.1	N.D.
Co	onclusion			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	/	/

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

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Regulation 1935/2004/EC, Council Directive 84/500/EEC

- Migration of Lead and Cadmium

Test Methods and Equipment: EN 1388-2: 1995; ICP-OES

				Test Result(s)		
Test Item(s)	Unit	Limit	MDL	1-1		
				A		
Simulant Used: 4% Acetic acid; Test Condition: 22°C, 24h;						
Soaking method: Internal	soaking					
Lead	mg/L	4.0	0.1	N.D.		
Cadmium	mg/L	0.3	0.01	N.D.		
	Conclusi	Conformity				

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Remark: Results shown above are testing data of one groups.

German Food, Articles of Daily Use and Feed Code of September, 2005(LFGB), Section 30 and BfR Recommendations, Regulation 1935/2004/EC, Council of Europe Resolution AP (2002)2

- Specific migration of Formaldehyde

Test Methods and Equipment: EN 13130-1:2004; UV-Vis

									Test result(s)		
Simulant Used	Test Condition	Unit	Limit	MDL		1-2					
					1 st migration	2 nd migration	3 rd migration				
3% Acetic acid	70℃, 2h	mg/kg	15	5	N.D.	N.D.	N.D.				
Conclusion					Conformity						

German Food, Articles of Daily Use and Feed Code of September, 2005(LFGB), Section 30 and BfR Recommendations, Regulation 1935/2004/EC, Council of Europe Resolution AP (2002)2

- Pentachlorophenol(PCP) content

Test Methods and Equipment: ENISO15320-2011; GC-MS

Test Item(s)	Unit	Limit	MDL	Test Result(s)
	Ollit	LIIIII	MIDL	1-2
Pentachlorophenol(PCP)	mg/kg	0.15	0.05	N.D.
	Conformity			

German Food, Articles of Daily Use and Feed Code of September, 2005(LFGB), Section 30 and BfR Recommendations, Regulation 1935/2004/EC, Council of Europe Resolution AP (2004)5 and Regulation (EU) 2024/3190

- Bisphenol A (BPA) content

Test Methods and Equipment: EPA 3540C:1996 & EPA 8321B:2007; LC-MS-MS

Tost Itom(s)	Linit	Limit	MDL	Test Result(s)
Test Item(s)	Unit			1-3
Bisphenol A (BPA)	mg/kg	Prohibition	0.01	N.D.
Со	Conformity			



German Food, Articles of Daily Use and Feed Code of September, 2005(LFGB), Section 30 and BfR

Recommendations, Regulation 1935/2004/EC, Council of Europe Resolution AP (2004)5

- Volatile Organic Components (VOC) content

Test Methods: LFGB BfR Part II section XV, May 2003 and LFGB section 35 B80.30 1(EG)

Temperature and Time: Bake at 100°C for 1h and then at 200°C for 4h

Test Item(s)	Unit	Limit	MDL	Test Result(s)
Test Item(s)				1-3
Volatile Organic Components	%	0.5	0.1	0.43
Conc	Conformity			

German Food, Articles of Daily Use and Feed Code of September, 2005(LFGB), Section 30 and BfR Recommendations, Regulation 1935/2004/EC, Council of Europe Resolution AP (2004)5

- Peroxides

Test Methods: European Pharmacopoeia 9.0 Method 2.5.5

Tost Itom(s)	Unit	Limit	MDL	Test Result(s)
Test Item(s)	Ollit			1-3
Peroxides	%	Absent	0.2	N.D.
	Conformity			

German Food, Articles of Daily Use and Feed Code of September, 2005(LFGB), Section 30 and BfR Recommendations, Regulation 1935/2004/EC, Council of Europe Resolution AP (2004)5

- Overall Migration

Test Method: EN 1186-3:2022

					Test result(s)
Simulant Used	Test Condition	Unit	Limit	MDL	1-3
					3 rd migration
3% Acetic acid	70℃, 2h	mg/dm ²	10	5	N.D.
50% Ethanol	70℃, 2h	mg/dm ²	10	5	N.D.
Conclusion					Conformity

German Food, Articles of Daily Use and Feed Code of September, 2005(LFGB), Section 30 and BfR Recommendations, Regulation 1935/2004/EC, Council of Europe Resolution AP (2004)5

- Specific migration of Bisphenol A (BPA)

Test Methods and Equipment: CEN/TS13130-13:2005; LC-MS-MS

					Test result(s)
Simulant Used	Test Condition	Unit	Limit	MDL	1-3
					3 rd migration
3% Acetic acid	70℃, 2h	mg/kg	0.05	0.02	N.D.
Conclusion					Conformity

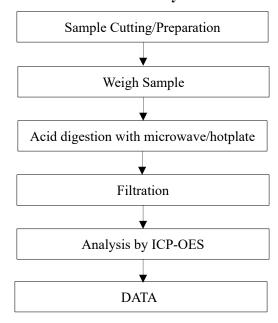


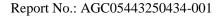
- Specific Migration of Organotin (measured as Tin)

Test Methods and Equipment: EN 13130-1:2004; ICP-OES

Simulant Used	Test Condition	lition Unit Limit MDL	Test result(s)		
Simulant Osed	Test Collaition	Oilit	Limit MDL	MDL	1-3
3% Acetic acid	70℃, 2h	mg/kg	0.1	0.01	N.D.
Conclusion					Conformity

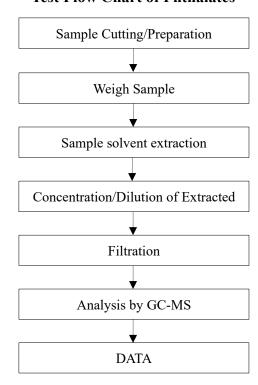
Test Flow Chart of Heavy Metal Content

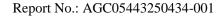






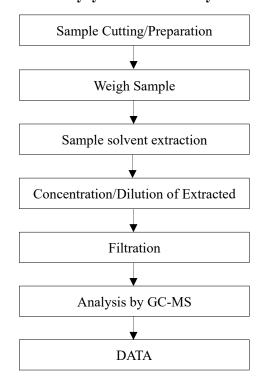
Test Flow Chart of Phthalates







Test Flow Chart of Polycyclic-aromatic Hydrocarbons (PAHs)





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- 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").
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*** End of Report ***



Applicant: MID OCEAN BRANDS B.V.

UNIT 711-716 7/F TOWER A 83 KING LAM STREET

CHEUNG SHA WAN KOWLOON

HONG KONG

Attn: DEREK HUI/EMMA LAM

Number: HKGH03262843 S1

Date: Jul 18, 2025

Sample and Information provided by customer:

Item Name : CX1523 Double wall borosilicate mug

CX1524 Double wall borosilicate mug

Item No. : **CX1523, CX1524**Quantity : 10 pieces per style

Vendor : 114276 Country of Origin : China Date sample received : Jul 08, 2025

Test Period : Jul 08, 2025 to Jul 16, 2025

For and on behalf of :

Intertek Testing Services HK Ltd.

Dorothy M.Y. Lau Vice President

Page 1 of 4

(N)



Number: HKGH03262843 S1

Conclusion:

The submitted sample was tested under the following requirements requested by the applicant, subject to the information stated in the remark and attached page(s) for details:

Requirement Result

See details enclosed (1) BS EN 1183: 1997 Materials and articles in contact with foodstuffs - Test methods for thermal shock and

thermal shock endurance

Decision Rule(s):

When a statement of conformity to a specification or standard is provided on test report, the decision rule shall be applied. For details, please refer to Intertek's "Decision Rule Document" and is available on Intertek's website. https://intertekhk.grd.by/decision-rule-doc. If decision rule already inhered in the requested specification or standard, Intertek's "Decision Rule Document" is not applicable and indication of "..." was shown as above table.

Note: This is to supersede Report No. HKGH03262843 dated Jul 17, 2025 due to Amending sample description



intertek.com.hk



Number: HKGH03262843 S1

(1) **Thermal Shock Test**

Test Standard : BS EN 1183: 1997 - Materials and articles in contact with foodstuffs - Test methods

for thermal shock and thermal shock endurance

Test procedure:

1. Test method B as specified in the standard was adopted for the test.

- 2. The sample was initially heated in an oven set to 60°C for 1 hour.
- 3. It was then transferred to cold water at 20°C and immersed for a period of approximately 1 minute.
- 4. The above steps were repeated except that the temperature of the oven was increased by:
 - 10°C for temperature difference ≤ 100°C
 - 20°C for temperature difference > 100°C
- 5. The test completed when failure occurred on all tested specimens.
- 6. The cumulative failure in % and the standard deviation was determined.

Number of samples tested: Ten (10) pieces (CX1523 Star style glass)

The temperature difference (Δt_{50}) at which 50% of the tested samples failed and its standard deviation:

Δt ₅₀	Standard deviation		
(°C)	(°C)		
165	19.0		

Test Data:

Temperature in oven (°C)	Temperature difference (°C)	Number of failure	Cumulative failure in %
60	40	0	0
70	50	0	0
80	60	0	0
90	70	0	0
100	80	0	0
110	90	0	0
120	100	0	0
140	120	0	0
160	140	1	10
180	160	3	40
200	180	4	80
220	200	2	100

Date sample received: Jul 08, 2025 Test Period: Jul 08, 2025 to Jul 16, 2025







Number: HKGH03262843 S1





End of report

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