Test Report

Report No.	: AGC05443240607-001

SAMPLE NAME	:	Sublimation ceramic mug
MODEL NAME	:	MO8040
APPLICANT	:	MID OCEAN BRANDS B.V
STANDARD(S)	:	Please refer to the following page(s).
DATE OF ISSUE	:	Jun. 12, 2024

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	:	Sublimation ceramic mug
Model	:	MO8040
Vendor code	:	111049
Country of Origin	:	CHINA
Country of Destination	:	EUROPE
Sample receiving state	:	Normal
Sample Received Date	:	Jun. 05, 2024
Testing Period	:	Jun. 05, 2024 to Jun. 12, 2024
Test Requested	:	Selected test(s) as requested by client.

Test Requested:	**Conclusion**
Microwave heating resistance test	Pass
Mechanical dishwashing safe test	Pass
Regulation 1935/2004/EC, Council Directive 84/500/EEC and Commission Directive 2005/31/EC, DIN 51032 for ceramic: - Leachable Lead and Cadmium	Pass

Approved by: Leon

Suhongliang, Leon

Technical Director

Report Revise Record

Report Version	Issued Date	Valid Version	Notes
/	Jun. 12, 2024	Valid	Initial release

The photo of the sample

The photo of AGC05443240607-001 is for use only with the original report.

Test Point Description

Test point	Test point description
1-1	Ceramic cup

Test Results:

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

Microwave heating resistance test

Test Sample:1

Test Result of microwave test
Sample No.:MO8040 Test method: Refer BS EN 15284 :007 Microwave power out: 800 W Short period: 90 s Long period: 585 s Number of tested sample: 3 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	32.2℃	94.1℃
2	32.1℃	94.4℃
3	32.6℃	94.3℃

For all tested 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 Sample:1

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.:MO8040 Test method: Refer BS EN 12875 -1-2005 Washing temperature: 60℃ Number of cycle: 10 cycles Number of tested sample: 2 pc(s). Number of control sample: 1 pc(s).
For all tested ceramic or glass enamel 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 cracking was found on the tested samples after wash. No decoration was detached after wash.

Ceramic articles intended to come into contact with food

- Leachable Lead and Cadmium

Test point	Test Result		Conclusion
	Extractable Lead(Pb)/(mg/L)	Extractable Cadmium(Cd)/(mg/L)	
	4% Acetic acid,22°C,24h	4% Acetic acid,22°C,24h	
1-1	N.D.	N.D.	**Conformity**
Limit	4.0	0.3	/
MDL	0.1	0.01	/

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 ***

TEST REPORT

Applicant: MID OCEAN BRANDS B.V.
7/F KINGS TOWER
111 KING LAM STREET
CHEUNG SHA WAN
KLN

Attn: DEREK HUI / EMMA LAM

Number: HKGH03163698

Date: Aug 09, 2024

Sample and Information provided by customer	:	
Item Name	:	**Sublimation ceramic mug**
Item No.	:	**MO8040**
Quantity	:	25 pieces
Vendor	:	115649
Country of Origin	:	China

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For and on behalf of :
Intertek Testing Services HK Ltd.

Dorothy M.Y. Lau
Vice President

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Number : HKGH03163698

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
(1)	BS EN 1183 : 1997 Materials and articles in contact with foodstuffs - Test methods for thermal shock and thermal shock endurance	See details enclosed
(2)	BS 8654 : 2015 Domestic and hospitality use ceramic tableware articles intended for contact with foodstuffs - Specification, - Clause 4.4.1.2 Handle strength	Pass
(3)	BS EN 12980:2000 - Materials and articles in contact with foodstuffs - non-metallic articles for catering and industrial use - Method of test for the determination of impact resistance.	See details enclosed

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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.
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(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

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

Δt_{50} (°C)	Standard deviation (°C)
146	9.7

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	3	30
180	160	7	100

Date sample received : Jul 30, 2024
Test Period : Jul 30, 2024 to Aug 07, 2024

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(2) Impact Resistance of Domestic tableware

Test Standard : BS 8654 : 2015 Domestic and hospitality use ceramic tableware articles intended for contact with foodstuffs - Specification, clause 4.4.1.2 Handle strength.

Test procedure:

1. The half way point of the handle between the upper and lower attachment of the submitted sample was initially marked.
2. The sample was placed in the position with the side of the handle facing toward the tup of the pendulum impact tester, so that the tup touched the marked point of the handle whilst hanging freely.
3. The tup was lifted to the height corresponding to the chosen energy of impact and then released to fall freely at the side of the handle.
4. The above steps were repeated such that the sample was subjected to impact with increasing energy level until failure occurred.
5. Any failure, e.g. crack, breakage or whose handles break, was recorded and impact energy to failure was calculated and reported in the test result.

Requirement: Impact energy to produce failure should be no less than 0.05J.

Number of samples tested: Three (3) pieces .

Test data (For informative)

The individual and average impact energies to produce initial fracture were recorded as follows:

SPECIMEN	IMPACT ENERGY (J)	NATURE OF FAILURE	AVERAGE IMPACT ENERGY (J)	Test Requirement	RESULT
1	0.351	HANDLE BROKE	0.328	>0.05J	PASS
2	0.337	HANDLE CRACKED			
3	0.297	HANDLE BROKE			

Date sample received : Jul 30, 2024
Testing period : Jul 30, 2024 to Aug 07, 2024

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(3) Impact Resistance of Tableware

Test standard: BS EN 12980: 2000 Materials and articles in contact with foodstuffs - non-metallic articles for catering and industrial use - Method of test for the determination of impact resistance.

Test procedure:
1. The intended point of impact on the submitted sample was initially marked.
2. The sample was placed in the position with the intended point of impact facing toward the tup of the pendulum impact tester, so that the tup touched the intended point of impact whilst hanging freely.
3. The tup was lifted to the height corresponding to the chosen energy of impact and then released to fall freely at the intended point of impact.
4. The above steps were repeated such that the sample was subjected to impact with increasing energy level until failure occurred.
5. Any failure, e.g. crack, breakage or whose handles break, was recorded and impact energy to failure was calculated and reported in the test result.

Number of samples tested: Ten (10) pieces.

Test conditions:
- Initial angular displacement: 1° .
- Successive higher angular displacement: 1° .
- Ambient temperature: 24°C.
- Position of impact: Rim

Result:

The individual height of fall and energy value to produce initial fracture were recorded, the average value and standard deviation were also calculated as follows :

Specimen	Height of fall (cm)	Impact energy (J)	Nature of failure
1	3.25	0.104	Rim Broke
2	3.51	0.112	Rim Cracked
3	2.75	0.088	Rim Broke
4	2.52	0.080	Rim Broke
5	3.78	0.120	Rim Broke
6	2.99	0.096	Rim Broke
7	2.75	0.088	Rim Broke
8	3.25	0.104	Rim Broke
9	2.52	0.080	Rim Broke
10	2.75	0.088	Rim Broke
Standard deviation	0.43	0.014	
Average	3.01	0.096	

Date sample received : Jul 30, 2024
Testing period : Jul 30, 2024 to Aug 07, 2024

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End of report

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