

Test Report

Report No.: AGC03507191012-001S1

Date: Oct.30, 2019

Page 1 of 12

Applicant: MID OCEAN BRANDS B.V
Address: 7/F, Kings Tower, 111 King Lam Street, Cheung Sha Wan, Kowloon, Hong Kong
Test site: 1,6/F., Building 2, No.1-4, Chaxi Sanwei Technical Industrial Park, Gushu, Xixiang, Baoan District, Shenzhen, Guangdong, China

Report on the submitted samples said to be:

Sample Name : Double wall SS mug
Model No. : MO9246
Supplier : 107978
Country of Origin : CHINA
Country of Destination : EUROPE
Sample Receiving Date : Oct.23, 2019
Testing Period : Oct.23, 2019 to Oct.29, 2019

Test Requested: : Please refer to next page(s).

Test Method : Please refer to next page(s).

Test Result : Please refer to next page(s).

Approved by:

Liulinwen, Lewis

Technical Director



The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by AGC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at <http://www.agc-cert.com>.

Test Report

Report No.: AGC03507191012-001S1

Date: Oct.30, 2019

Page 2 of 12

Test Requested:

1. As specified by client, to determine the Lead and Lead compounds content in the submitted sample(s) with reference to entry 63, Annex XVII of the REACH Regulation (EC) No 1907/2006.
2. As specified by client, to determine the Cadmium(Cd)content in the submitted sample(s) with reference to entry 23, Annex XVII of the REACH Regulation (EC) No 1907/2006.
3. As specified by client, to determine the Polycyclic Aromatic Hydrocarbons (PAHs) content in the submitted sample(s) with reference to entry 50, Annex XVII of the REACH Regulation (EC) No 1907/2006.
4. As specified by client, to determine the phthalates content in the submitted sample(s) with reference to entry 51 and its amendment (EU)2018/2005& entry 52, Annex XVII of the REACH Regulation (EC) No 1907/2006 and Amendment Regulation (EC) No 552/2009.
5. As specified by client, to test sample with reference to Regulation 1935/2004/EC, Regulation (EU) No.10/2011&(EU)2016/1416&(EU) 2017/752 and (EU) 2018/213 for plastic:
 - Overall Migration(3%(w/v) Acetic acid, 50% (v/v) Ethanol)
 - Specific Migration of Heavy metals
 - Migration of BPA
6. As specified by client, to test sample with reference to Regulation 1935/2004/EC and Council of Europe Resolution AP (2004) 4 and (EU) 2018/213 for TPR:
 - Overall Migration(3%(w/v) Acetic acid, 50% (v/v) Ethanol)
 - s- Migration of BPA
7. As specified by client, to test sample with reference to Regulation 1935/2004/EC and Council of Europe Resolution AP (2004) 5 and (EU) 2018/213 for silicone:
 - Overall Migration(3%(w/v) Acetic acid, 50% (v/v) Ethanol)
 - Migration of BPA

Conclusion

Pass

Pass

Pass

Pass

Pass

Pass

Pass

Pass

Pass

Pass

Pass

The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by AGC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at <http://www.agc-cert.com>.

AGC

Attestation of Global Compliance Std. & Tech.

No.18 C

Tel: +86-755 8358 3833 Fax: +86-755 2531 6612 E-mail: agc01@agc-cert.com 400 089 2118
Add: Building 2, No.171, Meihua Road, Shangmeilin, Futian District, Shenzhen, Guangdong China

Test Report

Report No.: AGC03507191012-001S1
Date: Oct.30, 2019
Page 3 of 12
Test Result(s):
1. Test Result(s) of Lead and Lead compounds content

Unit: mg/kg

Test item(s)	Test Method/ Equipment	MDL	Result(s)			Limit
			1-1	1-2	1-3	
Lead (Pb)	IEC 62321-5:2013 ICP-OES	10	N.D.	N.D.	N.D.	500
Conclusion		/	Pass	Pass	Pass	/

Unit: mg/kg

Test item(s)	Test Method/ Equipment	MDL	Result(s)			Limit
			1-4	1-5	1-6	
Lead (Pb)	IEC 62321-5:2013 ICP-OES	10	N.D.	N.D.	N.D.	500
Conclusion		/	Pass	Pass	Pass	/

Unit: mg/kg

Test item(s)	Test Method/ Equipment	MDL	Result(s)			Limit
			1-7	1-8	1-9	
Lead (Pb)	IEC 62321-5:2013 ICP-OES	10	N.D.	N.D.	13	500
Conclusion		/	Pass	Pass	Pass	/

- Note:**
1. MDL=Method Detection Limit
 2. N.D.=Not Detected(less than method detection limit)
 - 3.As specified by client, only test the designated sample

The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by AGC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at <http://www.agc-cert.com>.



Attestation of Global Compliance Std. & Tech.

No.18 C

 Tel: +86-755 8358 3833 Fax: +86-755 2531 6612 E-mail: agc01@agc-cert.com 400 089 2118
 Add: Building 2, No.171, Meihua Road, Shangmeilin, Futian District, Shenzhen, Guangdong China

Test Report

Report No.: AGC03507191012-001S1

Date: Oct.30, 2019

Page 4 of 12

2. Test Result(s) of Cd content

Unit: mg/kg

Test item(s)	Test Method/ Equipment	MDL	Result(s)			Limit
			1-1	1-2	1-3	
Cadmium (Cd)	IEC 62321-5:2013 ICP-OES	10	N.D.	N.D.	N.D.	100
Conclusion		/	Pass	Pass	Pass	/

Unit: mg/kg

Test item(s)	Test Method/ Equipment	MDL	Result(s)			Limit
			1-4	1-5	1-6	
Cadmium (Cd)	IEC 62321-5:2013 ICP-OES	10	N.D.	N.D.	N.D.	100
Conclusion		/	Pass	Pass	Pass	/

Unit: mg/kg

Test item(s)	Test Method/ Equipment	MDL	Result(s)			Limit
			1-7	1-8	1-9	
Cadmium (Cd)	IEC 62321-5:2013 ICP-OES	10	N.D.	N.D.	N.D.	100
Conclusion		/	Pass	Pass	Pass	/

- Note:**
1. MDL=Method Detection Limit
 2. N.D.=Not Detected(less than method detection limit)
 3. As specified by client, only test the designated sample

The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by AGC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at <http://www.agc-cert.com>.

Test Report

Report No.: AGC03507191012-001S1
Date: Oct.30, 2019
Page 5 of 12
3. Test Result(s) of Polycyclic Aromatic Hydrocarbons (PAHs)

Unit: mg/kg

Test Item(s)	Test Method /Equipment	MDL	Result(s)		Limit
			1-1	1-2	
Benzo[a]anthracene (BaA)	AfPS GS 2014:01 PAK GC-MS	0.1	N.D.	N.D.	1
Chrysene (CHR)		0.1	N.D.	N.D.	1
Benzo[b]fluoranthene (BbFA)		0.1	N.D.	N.D.	1
Benzo[k]fluoranthene (BkFA)		0.1	N.D.	N.D.	1
Benzo[j]fluoranthene (BjFA)		0.1	N.D.	N.D.	1
Benzo[a]pyrene (BaP)		0.1	N.D.	N.D.	1
Benzo[e]pyrene(BeP)		0.1	N.D.	N.D.	1
Dibenzo[a,h]anthracene (DBAhA)		0.1	N.D.	N.D.	1
Sum of 8 PAHs		—	N.D.	N.D.	—
Conclusion		/	Pass	Pass	/

Unit: mg/kg

Test Item(s)	Test Method /Equipment	MDL	Result(s)		Limit
			1-3	1-4	
Benzo[a]anthracene (BaA)	AfPS GS 2014:01 PAK GC-MS	0.1	N.D.	N.D.	1
Chrysene (CHR)		0.1	N.D.	N.D.	1
Benzo[b]fluoranthene (BbFA)		0.1	N.D.	N.D.	1
Benzo[k]fluoranthene (BkFA)		0.1	N.D.	N.D.	1
Benzo[j]fluoranthene (BjFA)		0.1	N.D.	N.D.	1
Benzo[a]pyrene (BaP)		0.1	N.D.	N.D.	1
Benzo[e]pyrene(BeP)		0.1	N.D.	N.D.	1
Dibenzo[a,h]anthracene (DBAhA)		0.1	N.D.	N.D.	1
Sum of 8 PAHs		—	N.D.	N.D.	—
Conclusion		/	Pass	Pass	/

- Note:**
1. MDL=Method Detection Limit
 2. N.D.=Not Detected(less than method detection limit)
 3. “—”=Not regulated
 4. As specified by client, only test the designated sample.

The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by AGC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at <http://www.agc-cert.com>.



Test Report

Report No.: AGC03507191012-001S1

Date: Oct.30, 2019

Page 6 of 12

4. Test Result(s) of phthalates content

Unit: %, w/w

Test Item(s)	Test Method/ Equipment	MDL	Result(s)				Limit
			1-1	1-2	1-3	1-4	
Dibutyl phthalate (DBP)	EN 14372:2004 GC-MS	0.01	N.D.	N.D.	N.D.	N.D.	0.1
Butylbenzyl phthalate (BBP)		0.01	N.D.	N.D.	N.D.	N.D.	0.1
Di- (2-ethylhexyl) phthalate (DEHP)		0.01	N.D.	N.D.	N.D.	N.D.	0.1
Diisobutyl phthalate (DIBP)		0.01	N.D.	N.D.	N.D.	N.D.	0.1
Sum of DBP+BBP+DEHP+DIBP		—	N.D.	N.D.	N.D.	N.D.	0.1
Di-n-octyl phthalate (DNOP)		0.01	N.D.	N.D.	N.D.	N.D.	-
Di-isononyl phthalate (DINP)		0.01	N.D.	N.D.	N.D.	N.D.	
Di-isodecyl phthalate (DIDP)		0.01	N.D.	N.D.	N.D.	N.D.	
Sum of DNOP+DINP+DIDP		—	N.D.	N.D.	N.D.	N.D.	0.1
Conclusion		/	Pass	Pass	Pass	Pass	/

Unit: %, w/w

Test Item(s)	Test Method/ Equipment	MDL	Result(s)				Limit
			1-5	1-6	1-7	1-8	
Dibutyl phthalate (DBP)	EN 14372:2004 GC-MS	0.01	N.D.	N.D.	N.D.	N.D.	0.1
Butylbenzyl phthalate (BBP)		0.01	N.D.	N.D.	N.D.	N.D.	0.1
Di- (2-ethylhexyl) phthalate (DEHP)		0.01	N.D.	N.D.	N.D.	N.D.	0.1
Diisobutyl phthalate (DIBP)		0.01	N.D.	N.D.	N.D.	N.D.	0.1
Sum of DBP+BBP+DEHP+DIBP		—	N.D.	N.D.	N.D.	N.D.	0.1
Di-n-octyl phthalate (DNOP)		0.01	N.D.	N.D.	N.D.	N.D.	-
Di-isononyl phthalate (DINP)		0.01	N.D.	N.D.	N.D.	N.D.	
Di-isodecyl phthalate (DIDP)		0.01	N.D.	N.D.	N.D.	N.D.	
Sum of DNOP+DINP+DIDP		—	N.D.	N.D.	N.D.	N.D.	0.1
Conclusion		/	Pass	Pass	Pass	Pass	/

- Note:**
- 0.1%,w/w =1000mg/kg
 - MDL=method detection limit
 - N.D.=not detected (less than method detection limit)

The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by AGC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at <http://www.agc-cert.com>.

Test Report

Report No.: AGC03507191012-001S1
Date: Oct.30, 2019

Page 7 of 12

4. “—”=Not regulated
5. As specified by client, only test the designated sample

EU food contact materials
For plastic
5.1. Test result of Overall Migration

 Unit: mg/dm²

Test Solution	Test condition	MDL	Test Result(s)	Limit
			1-1	
3%(w/v) Acetic acid	70°C, 2h	5	N.D.	10
50% (v/v) Ethanol		5	N.D.	10
Conclusion	/	/	Pass	/

Note: 1. N.D.=not detected (less than method detection limit)

2. MDL=method detection limit

 3. Surface area/Volume=6 dm²/1L

5.2. Test result of Special Migration of Heavy metals

Unit: mg/kg

Test Item(s)	Test condition/ Equipment	MDL	Test Result(s)	Limit
			3% (w/v) Acetic acid	
			1-1	
Aluminum (Al) (M)	70°C, 2h / ICP-OES	0.5	N.D.	1
Barium (Ba) (M)		0.25	N.D.	1
Cobalt (Co) (M)		0.01	N.D.	0.05
Copper (Cu) (M)		0.25	N.D.	5
Iron (Fe) (M)		0.25	N.D.	48
Lithium (Li) (M)		0.5	N.D.	0.6
Manganese (Mn) (M)		0.25	N.D.	0.6
Zinc (Zn) (M)		0.5	N.D.	5
Nickel (Ni) (M)		0.01	N.D.	0.02
Conclusion	/	/	Pass	/

The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by AGC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at <http://www.agc-cert.com>.



Test Report

Report No.: AGC03507191012-001S1
Date: Oct.30, 2019

Page 8 of 12

- Note:** 1. N.D.= not detected (less than method detection limit)
 2. M= Migration
 3. MDL= method detection limit
 4. Surface area/Volume=6 dm²/1L

5.3. Test result of Migration of BPA

Unit: mg/kg

Test Item(s)	Test condition/ Equipment	MDL	Result(s)	Limit
			3% (w/v) Acetic acid	
			1-1	
Migration of BPA	70°C, 2h/ LC-MS-MS	0.02	N.D.	0.05
Conclusion	/	/	Pass	/

- Note:** 1. N.D.=not detected (less than method detection limit)
 2. MDL=method detection limit
 3. Surface area/Volume=6 dm²/1L

For TPR

6.1. Overall Migration

Unit: mg/kg

Test Solution	Test condition	MDL	Test Result(s)	Limit
			1-2	
3%(w/v) Acetic acid	70°C, 2h	20	21.4	60
50% (v/v) Ethanol		20	N.D.	60
Conclusion	/	/	Pass	/

- Note:** 1. N.D.=not detected (less than method detection limit)
 2. MDL=method detection limit
 3. Surface area/Volume=6 dm²/1L

The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by AGC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at <http://www.agc-cert.com>.


AGC

Attestation of Global Compliance Std. & Tech.

No.18 C
 Tel: +86-755 8358 3833 Fax: +86-755 2531 6612 E-mail: agc01@agc-cert.com 400 089 2118
 Add: Building 2, No.171, Meihua Road, Shangmeilin, Futian District, Shenzhen, Guangdong China

Test Report

Report No.: AGC03507191012-001S1

Date: Oct.30, 2019

Page 9 of 12

6.2. Test result of Migration of BPA

Unit: mg/kg

Test Item(s)	Test condition/ Equipment	MDL	Result(s)	Limit
			3% (w/v) Acetic acid	
			1-2	
Migration of BPA	70°C, 2h/ LC-MS-MS	0.02	N.D.	0.05
Conclusion	/	/	Pass	/

Note: 1. N.D.=not detected (less than method detection limit)

2. MDL=method detection limit

3. Surface area/Volume=6 dm²/1L

For silicone

7.1. Overall Migration

 Unit: mg/dm²

Test Solution	Test condition	MDL	Test Result(s)	Limit
			1-3	
3%(w/v) Acetic acid	70°C, 2h	5	N.D.	10
50% (v/v) Ethanol		5	N.D.	10
Conclusion	/	/	Pass	/

Note: 1. N.D.=not detected (less than method detection limit)

2. MDL=method detection limit

3. Surface area/Volume=6 dm²/1L

The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by AGC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at <http://www.agc-cert.com>.



Attestation of Global Compliance Std. & Tech.

 Tel: +86-755 8358 3833 Fax: +86-755 2531 6612 E-mail: agc01@agc-cert.com 400 089 2118
 Add: Building 2, No.171, Meihua Road, Shangmeilin, Futian District, Shenzhen, Guangdong China

No.18 C

Test Report

Report No.: AGC03507191012-001S1
Date: Oct.30, 2019

Page 10 of 12

7.2. Test result of Migration of BPA

Unit: mg/kg

Test Item(s)	Test condition/ Equipment	MDL	Result(s)	Limit
			3% (w/v) Acetic acid	
			1-3	
Migration of BPA	70°C, 2h/ LC-MS-MS	0.02	N.D.	0.05
Conclusion	/	/	Pass	/

Note: 1. N.D.=not detected (less than method detection limit)

2. MDL=method detection limit

 3. Surface area/Volume=6 dm²/1L

Sample Description

1-1	Black PP
1-2	Black TPR
1-3	White silicone ring
1-4	Black EVA
1-5	Black coating
1-6	Silver coating
1-7	Orange coating
1-8	Blue coating
1-9	201 S/S

The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by AGC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at <http://www.agc-cert.com>.


Attestation of Global Compliance Std. & Tech.
No.18 C
 Tel: +86-755 8358 3833 Fax: +86-755 2531 6612 E-mail: agc01@agc-cert.com 400 089 2118
 Add: Building 2, No.171, Meihua Road, Shangmeilin, Futian District, Shenzhen, Guangdong China

Test Report

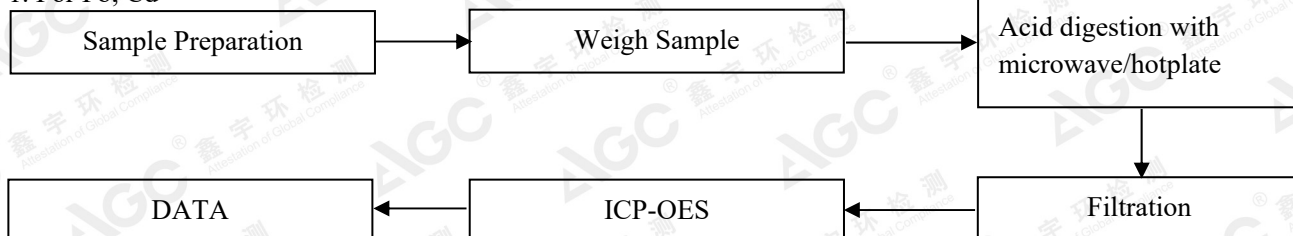
Report No.: AGC03507191012-001S1

Date: Oct.30, 2019

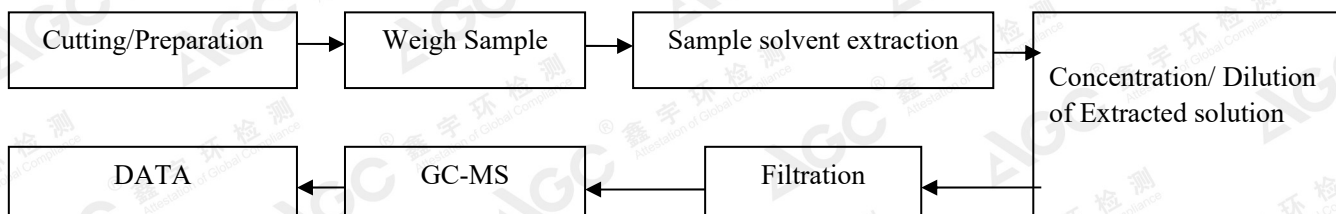
Page 11 of 12

Test Flow Chart

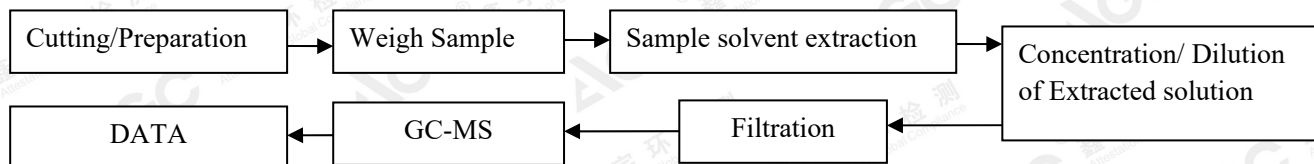
1. For Pb, Cd



2. For PAHs



3. For phthalates



This report is to supersede the report with No.: AGC03507191012-001 dated on Oct.29, 2019.

The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by AGC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at <http://www.agc-cert.com>.

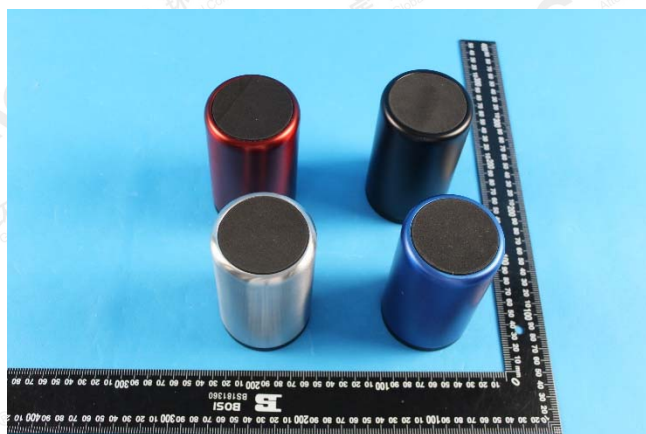
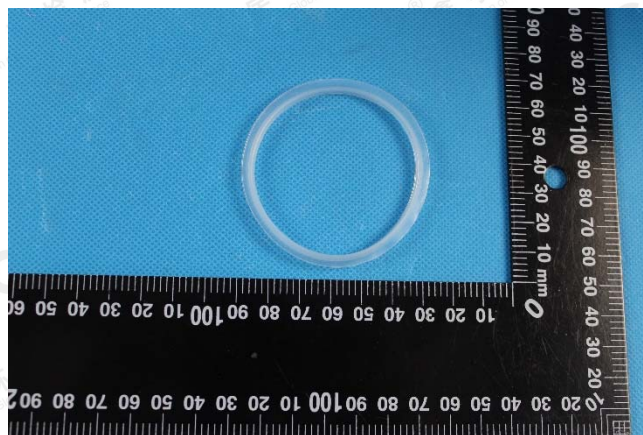
Test Report

Report No.: AGC03507191012-001S1

Date: Oct.30, 2019

Page 12 of 12

The photo of the sample



AGC03507191012-001S1

AGC authenticate the photo on original report only

*** End of Report***

The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by AGC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at <http://www.agc-cert.com>.

AGC

Attestation of Global Compliance Std. & Tech.

Tel: +86-755 8358 3833 Fax: +86-755 2531 6612 E-mail: agc01@agc-cert.com 400 089 2118
Add: Building 2, No.171, Meihua Road, Shangmeilin, Futian District, Shenzhen, Guangdong China

No.18 C