

---

# Test Report

---

Report No. : AGC05443231025-001

**SAMPLE NAME** : Ball pen Notebook and Bottle  
**MODEL NAME** : MO2162  
**APPLICANT** : MID OCEAN BRANDS B.V  
**STANDARD(S)** : Please refer to the following page(s).  
**DATE OF ISSUE** : Jan. 05, 2024

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



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](mailto:agc01@agccert.com).



Report No.: AGC05443231025-001

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 : Ball pen Notebook and Bottle  
Model : MO2162  
Vendor code : 104901  
Country of Origin : CHINA  
Country of Destination : EUROPE  
Sample Received Date : Oct. 19, 2023  
Testing Period : Oct. 19, 2023 to Jan. 05, 2024  
Test Requested : Selected test(s) as requested by client.

Approved by : Jessie.Liang

Liangdan, Jessie.Liang

Technical Director

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.

Attestation of Global Compliance(Shenzhen)Co., Ltd  
Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd  
Tel: +86-755 2523 4088 E-mail: agc@agccert.com Web: http://www.agccert.com/

**Test Requested:**

**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
Annex XVII of the REACH Regulation (EC) No 1907/2006, entry 43 - Aromatic Amines Azodyes (AZO) Content	Pass
- Color fastness to rubbing	Pass
German Food, Articles of Daily Use and Feed Code of September, 2005(LFGB), Section 30 & 31, and BfR recommendation IX, Regulation 1935/2004/EC, Regulation (EU) No 10/2011 and its amendment Regulation (EU) 2020/1245	
- Overall migration	Pass
- Bisphenol A(BPA) content	Pass
- Specific migration of Bisphenol A(BPA)	Pass
- Specific migration of Heavy metals	Pass
-Specific migration of Primary aromatic amines	Pass
DM-4B-COM-003-v01 for:	
-Volatile Organic Matter	Pass
- Peroxide value	Pass
- Specific Migration of Organotin (measured as Tin)	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

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.

## Report Revise Record

Report Version	Issued Date	Valid Version	Notes
/	Jan. 05, 2024	Valid	Initial release

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.

Attestation of Global Compliance(Shenzhen)Co., Ltd

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

Tel: +86-755 2523 4088 E-mail: agc@agccert.com Web: <http://www.agccert.com/>

### The photo of the sample



The photo of AGC05443231025-001 is for use only with the original report.

### Test Point Description

Test point	Test point description
1-1	Black coating (bottle)
1-2	Black plastic cover (bottle)
1-3	Transparent silicone ring (bottle)
1-4	Metal cup body (bottle)
1-5	Metal handle (bottle)
1-6	Black elastic band (notebook) +Black rope (notebook) +Black cloth (notebook)
1-7	Metal sheet with black coating (notebook)
1-8	Inner sheet paper (notebook)
1-9	Blue plastic refill cap (ballpen)
1-10	Metal pen holder (ballpen)
1-11	Metal pen clip (ballpen)
1-12	Metal refill tube (ballpen)
1-13	Blue pen ink
1-14	Black elastic band (notebook)
1-15	Black rope (notebook)
1-16	Black cloth (notebook)
1-17	Paper Box

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.

**Test Results:**

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

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

Test Item(s)	Unit	Limit	MDL	Test Result(s)		
				1-4	1-5	1-6
Lead(Pb)	mg/kg	500	10	19	N.D.	N.D.
Conclusion				Conformity	Conformity	Conformity

Test Item(s)	Unit	Limit	MDL	Test Result(s)		
				1-7	1-8	1-9
Lead(Pb)	mg/kg	500	10	N.D.	N.D.	N.D.
Conclusion				Conformity	Conformity	Conformity

Test Item(s)	Unit	Limit	MDL	Test Result(s)		
				1-10	1-11	1-12
Lead(Pb)	mg/kg	500	10	N.D.	N.D.	N.D.
Conclusion				Conformity	Conformity	Conformity

Test Item(s)	Unit	Limit	MDL	Test Result(s)	
				1-13	1-17
Lead(Pb)	mg/kg	500	10	N.D.	N.D.
Conclusion				Conformity	Conformity

Remark:

1. As specified by client, the submitted samples were mixed to test, the test points: 1-6

Remark:The samples of the following test points were submitted on November 15, 2023: 1-3

Remark:The samples of the following test points were submitted on December 28, 2023:1-2

**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)	
				1-1	1-2
Cadmium(Cd)	mg/kg	100	10	N.D.	N.D.
Conclusion				Conformity	Conformity

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.

Attestation of Global Compliance(Shenzhen)Co., Ltd

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

Tel: +86-755 2523 4088 E-mail: agc@agccert.com Web: http://www.agccert.com/

Test Item(s)	Unit	Limit	MDL	Test Result(s)	
				1-3	1-9
Cadmium(Cd)	mg/kg	100	10	N.D.	N.D.
Conclusion				Conformity	Conformity

Remark:

Remark:The samples of the following test points were submitted on November 15, 2023: 1-3

Remark:The samples of the following test points were submitted on December 28, 2023:1-2

**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)	
				1-1	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.
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.
Conclusion				Conformity	Conformity

Test Item(s)	Unit	Limit	MDL	Test Result(s)	
				1-3	1-9
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.
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.
Conclusion				Conformity	Conformity

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.

Attestation of Global Compliance(Shenzhen)Co., Ltd

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

Tel: +86-755 2523 4088 E-mail: agc@agccert.com Web: http://www.agccert.com/

Remark:

Remark:The samples of the following test points were submitted on November 15, 2023: 1-3

Remark:The samples of the following test points were submitted on December 28, 2023:1-2

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)		
				1-1	1-2	1-3
Benzo[a]pyrene(BaP)	mg/kg	1	0.1	N.D.	N.D.	N.D.
Benzo[e]pyrene(BeP)	mg/kg	1	0.1	N.D.	N.D.	N.D.
Benzo[a]anthracene(BaA)	mg/kg	1	0.1	N.D.	N.D.	N.D.
Benzo[b]fluoranthene(BbF)	mg/kg	1	0.1	N.D.	N.D.	N.D.
Benzo[j]fluoranthene(BjFA)	mg/kg	1	0.1	N.D.	N.D.	N.D.
Benzo[k]fluoranthene(BkF)	mg/kg	1	0.1	N.D.	N.D.	N.D.
Chrysene(CHR)	mg/kg	1	0.1	N.D.	N.D.	N.D.
Dibenzo[a,h]anthracene(DBA)	mg/kg	1	0.1	N.D.	N.D.	N.D.
Conclusion				Conformity	Conformity	Conformity

Remark:

Remark:The samples of the following test points were submitted on November 15, 2023: 1-3

Remark:The samples of the following test points were submitted on December 28, 2023:1-2

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

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.

Attestation of Global Compliance(Shenzhen)Co., Ltd

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

Tel: +86-755 2523 4088 E-mail: agc@agccert.com Web: http://www.agccert.com/



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]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	/	/

**Annex XVII of the REACH Regulation (EC) No 1907/2006, entry 43**

**- Aromatic Amines Azodyes (AZO) Content**

Test Methods and Equipment: EN ISO 14362-1:2017; GC-MS

Test Item(s)	Unit	Limit	MDL	Test Result(s)
				1-6
4-Aminobiphenyl CAS:92-67-1	mg/kg	30	5	N.D.
Benzidine CAS:92-87-5	mg/kg	30	5	N.D.
4-Chloro-o-toluidine CAS:95-69-2	mg/kg	30	5	N.D.
2-Naphthylamine CAS:91-59-8	mg/kg	30	5	N.D.
o-Aminoazotoluene CAS:97-56-3	mg/kg	30	5	N.D.
5-Nitro-o-toluidine CAS:99-55-8	mg/kg	30	5	N.D.
p-Chloroaniline CAS:106-47-8	mg/kg	30	5	N.D.
4-Methoxy-m-phenylenediamine CAS:615-05-4	mg/kg	30	5	N.D.
4,4'-Diaminodiphenylmethane CAS:101-77-9	mg/kg	30	5	N.D.
3,3'-Dichlorobenzidine CAS:91-94-1	mg/kg	30	5	N.D.

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.

Attestation of Global Compliance(Shenzhen)Co., Ltd

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

Tel: +86-755 2523 4088 E-mail: agc@agccert.com Web: http://www.agccert.com/

Test Item(s)	Unit	Limit	MDL	Test Result(s)
				1-6
3,3'-Dimethoxybenzidine CAS:119-90-4	mg/kg	30	5	N.D.
3,3'-Dimethybenzidine CAS:119-93-7	mg/kg	30	5	N.D.
4,4'-Methylenedi-o-toluidine CAS:838-88-0	mg/kg	30	5	N.D.
p-Cresidine CAS:120-71-8	mg/kg	30	5	N.D.
4,4'-Methylenebis[2-chloroaniline] CAS:101-14-4	mg/kg	30	5	N.D.
4,4'-Oxydianiline CAS:101-80-4	mg/kg	30	5	N.D.
4,4'-Thiodianiline CAS:139-65-1	mg/kg	30	5	N.D.
2-Aminotoluene CAS:95-53-4	mg/kg	30	5	N.D.
2,4-Toluyldiamine CAS:95-80-7	mg/kg	30	5	N.D.
2,4,5-Trimethylaniline CAS:137-17-7	mg/kg	30	5	N.D.
o-Anisidine CAS:90-04-0	mg/kg	30	5	N.D.
4-Aminoazobenzene CAS:60-09-3	mg/kg	30	5	N.D.
Conclusion				Conformity

**Remark:**

1. As specified by client, the submitted samples were mixed to test, the test points: 1-6

Note: 4-aminoazobenzene: The EN ISO 14362-1:2017 or ISO 17234-1:2020 methods will enable further cleavage of 4-aminoazobenzene to aniline and / or 1,4-phenylenediamine. If aniline and / or 1,4-phenylenediamine are detected, 4-aminoazobenzene shall be further determined by EN ISO 14362-3:2017 or ISO 17234-2:2011.

**- Color fastness to rubbing**

**Test Method:** ISO 105-X12:2016

**Rubbing finger:** Cylinder

**The time of conditioning as well as the atmospheric conditions during testing:** 21.5°C, 65 %R.H., 4 hrs

**The long direction of the specimen** Endwise/ Crossrange

**The percentage of soak of wet rubbing cloth:** 95%~100%

Test point	Test Result		Conclusion
	Colour fastness to rubbing / (Grade)		
	Dry rubbing	Wet rubbing	
1-14	4-5	4-5	Conformity
1-15	4-5	4-5	Conformity

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.

Attestation of Global Compliance(Shenzhen)Co., Ltd

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

Tel: +86-755 2523 4088 E-mail: agc@agccert.com Web: http://www.agccert.com/

Test point	Test Result		Conclusion
	Colour fastness to rubbing / (Grade)		
	Dry rubbing	Wet rubbing	
1-16	4-5	4-5	Conformity
<b>Limit (Client's Requirement)</b>	≥2-3	≥2-3	/

Note:

Colour Fastness Grade:

Grade 5 = No Colour Change (Best Grade)

Grade 1 = Colour Change Seriously (Bad Grade)

9 grades in gray sample card: 5, 4-5, 4, 3-4, 3, 2-3, 2, 1-2, 1.

#### - Overall Migration

Test point		Test result		Conclusion
		Overall migration/ (mg/dm <sup>2</sup> )		
		3% Acetic acid, 70°C,2h	50% Ethanol, 70°C,2h	
1-2	1 <sup>st</sup> migration	N.D.	N.D.	Conformity
	2 <sup>nd</sup> migration	N.D.	N.D.	
	3 <sup>rd</sup> migration	N.D.	N.D.	
<b>Limit</b>		10	10	/
<b>MDL</b>		5	5	/

Test point		Test result		Conclusion
		Overall migration/ (mg/dm <sup>2</sup> )		
		3% Acetic acid, 70°C,2h	50% Ethanol, 70°C,2h	
1-3		N.D.	N.D.	Conformity
<b>Limit</b>		10	10	/
<b>MDL</b>		5	5	/

Remark: The samples of the following test points were submitted on November 15, 2023: 1-2, 1-3

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 15 days 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.

Attestation of Global Compliance(Shenzhen)Co., Ltd

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

Tel: +86-755 2523 4088 E-mail: agc@agccert.com Web: http://www.agccert.com/

**- Bisphenol A(BPA) content**

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

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

<b>Test Item</b>	Bisphenol A (BPA)
<b>Limit(mg/kg)</b>	Absent
<b>MDL (mg/kg)</b>	0.1
<b>Test Method/ Instrument</b>	EPA 3540C:1996& EPA 8321B:2007/ LC-MS-MS

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

Remark:The samples of the following test points were submitted on November 15, 2023: 1-3

Remark:The samples of the following test points were submitted on December 28, 2023:1-2

**- Specific migration of Bisphenol A(BPA)**

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

Remark:The samples of the following test points were submitted on November 15, 2023: 1-3

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.

Attestation of Global Compliance(Shenzhen)Co., Ltd

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

Tel: +86-755 2523 4088 E-mail: agc@agccert.com Web: http://www.agccert.com/

**-Specific migration of Primary aromatic amines**

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'-Dimethylbenzidine	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

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.

Test Item(s)	Test Result (mg/kg)
	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'-Dimethylbenzidine	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.
<b>Conclusion</b>	<b>Conformity</b>

Remark: The samples of the following test points were submitted on November 15, 2023: 1-2

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 15 days 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.

**-Specific migration of Heavy metals**

Test Item(s)	Test condition/ Equipment	MDL (mg/kg)	Test Result(s) (mg/kg)			Limit (mg/kg)
			1-2			
			1 <sup>st</sup> migration	2 <sup>nd</sup> migration	3 <sup>rd</sup> migration	
Barium (Ba)	3% Acetic acid/ 70°C, 2h/ ICP-OES/ IC	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)		/	N.D.	N.D.	N.D.	0.05
Antimony (Sb)		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
<b>Conclusion</b>		/	<b>Conformity</b>			/
Ammonium (NH <sub>4</sub> <sup>+</sup> )		0.10	N.D.	N.D.	N.D.	/
Calcium (Ca)		0.01	0.242	0.023	0.027	/
Magnesium (Mg)		0.01	0.019	N.D.	N.D.	/
Potassium (K)		0.01	0.111	N.D.	N.D.	/
Sodium (Na)		0.01	0.746	0.040	N.D.	/

Remark: The samples of the following test points were submitted on November 15, 2023: 1-2

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 15 days 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.

**- Volatile Organic Matter**

Unit: %

Test item(s)	Test Condition	MDL	Result(s)	Limit
			1-3	
Volatile Organic Matter	200°C, 4h	0.1	N.D.	0.5
<b>Conclusion</b>		/	<b>Conformity</b>	/

Remark: The samples of the following test points were submitted on November 15, 2023: 1-3

**- Peroxide value**

Unit: %

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

Remark: The samples of the following test points were submitted on November 15, 2023: 1-3

**- Specific Migration of Organotin (measured as Tin)**

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

Remark: The samples of the following test points were submitted on November 15, 2023: 1-3

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 15 days 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.



**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

Test Item(s)	Test condition/ Equipment	MDL	Test Result(s)	Limit
			1 <sup>st</sup> + 2 <sup>nd</sup> extractives	
			1-4	
Barium (Ba)	0.5% citric acid, 70°C, 2h ICP-OES	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)		0.005	N.D.	0.07
Nickel (Ni)		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	
<b>Conclusion</b>		/	<b>Conformity</b>	/

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.

Attestation of Global Compliance(Shenzhen)Co., Ltd

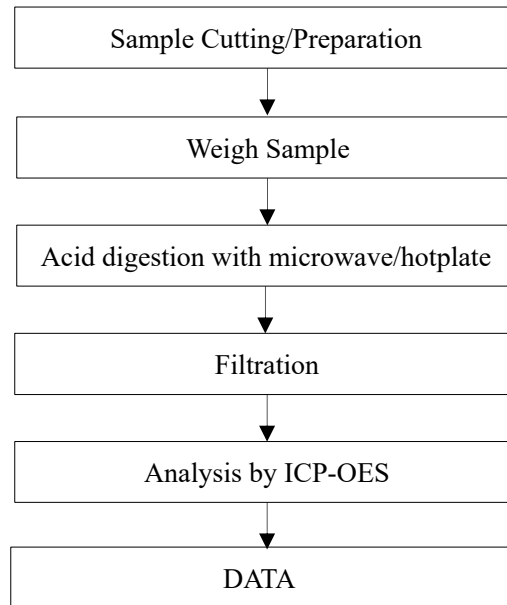
Attestation of Global Compliance(Shenzhen)Std &amp; Tech Co., Ltd

Tel: +86-755 2523 4088 E-mail: agc@agccert.com Web: http://www.agccert.com/

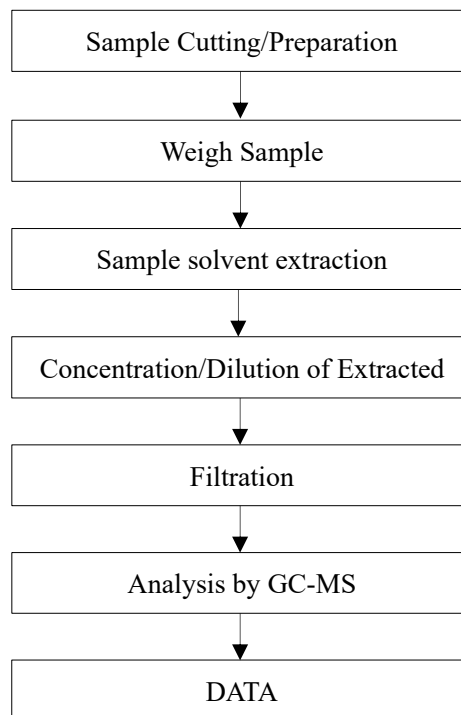
Test Item(s)	Test condition/ Equipment	MDL	Test Result(s)	Limit
			3 <sup>rd</sup> extractives	
			1-4	
Barium (Ba)	0.5% citric acid, 70°C, 2h ICP-OES	0.1	N.D.	1.2
Copper (Cu)		0.1	N.D.	4
Iron (Fe)		0.1	N.D.	40
Tin (Sn)		0.1	N.D.	100
Chromium (Cr)		0.01	N.D.	0.25
Manganese (Mn)		0.1	N.D.	1.8
Zinc (Zn)		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)		0.005	N.D.	0.01
Nickel (Ni)		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	
<b>Conclusion</b>		/	<b>Conformity</b>	/

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.

### Test Flow Chart of Heavy Metal Content



### Test Flow Chart of Phthalates



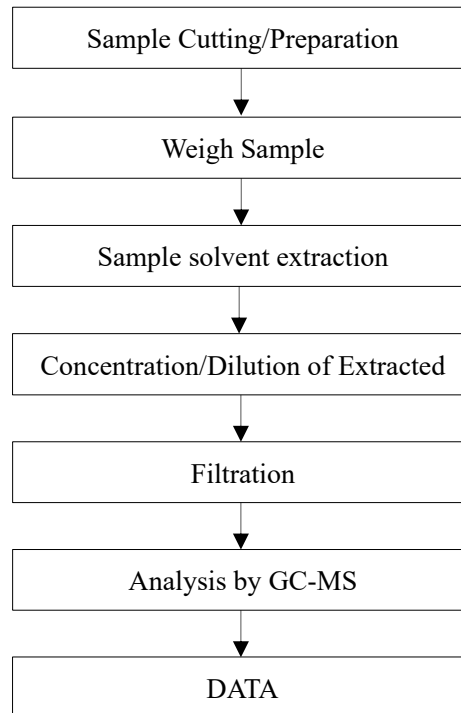
Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the “Dedicated Testing/Inspection Stamp” is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the 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](mailto:agc01@agccert.com).

Attestation of Global Compliance(Shenzhen)Co., Ltd

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

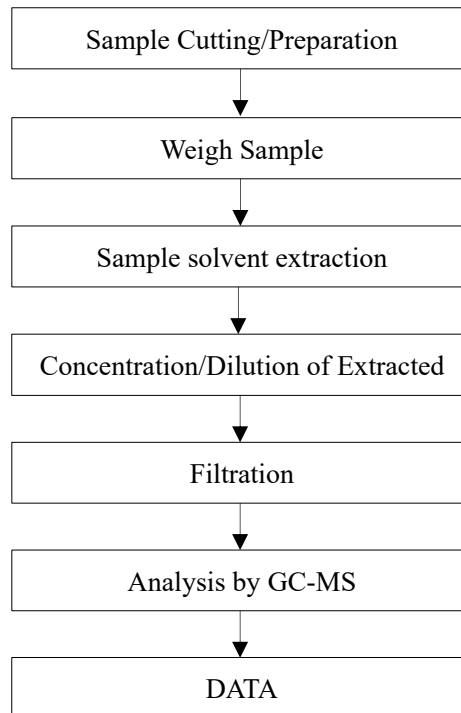
Tel: +86-755 2523 4088 E-mail: [agc@agccert.com](mailto:agc@agccert.com) Web: <http://www.agccert.com/>

### Test Flow Chart of Polycyclic-aromatic Hydrocarbons (PAHs)



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](mailto:agc01@agccert.com).

### Test Flow Chart of AZO



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](mailto:agc01@agccert.com).

## 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 \*\*\*

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](mailto:agc01@agccert.com).