Test Report

Report No.:CTT2309030925EN

Applicant: MACMA Werbeartikel oHG
Address: Thomas-Mann-Str.60 DE 90471 Nuernberg,Germany

Sample Received Date: Jul. 28, 2023
Completed Date: Aug. 22, 2023
Report Date: Sep. 12, 2023

The following merchandise was (were) submitted and identified on behalf of the applicant as:
Sample Name: Aluminum Drinking Bottle
Model No.: 8378306

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

Signed for and on Behalf of CTT:

Frank
Technical Manager

Verification Report

This test report is issued by the company subject to its General Conditions of Services and accessible at http://www.cttlab.com/order/20210319090829016 6.pdf. The sample is provided by the applicant, our company is not responsible for the integrity, authenticity and identification information of the sample. Unless otherwise stated the results shown in this report only apply to the sample as received. Without prior written permission of the company, this test report cannot be reproduced, except in full. Any inquiry about this report, please raise from the date of receipt of the report within 30 days,overdue will not be accept. Items marked with "n" means they are not accredited by CNAS (if with CNAS logo), "s" means the item of subcontractor. All or part of items of this report are not in the accredited scope of CMA and cannot be as domestic social impartiality proof data.

Zhejiang Consumer Testing Technology Co., Ltd.
1st-3rd Floor, Building 5, Block B, Innovation Entrepreneurship Street, No. E21, Xinke Road, Choujiang District, Yiwu, Jinhua, Zhejiang, Pilot Free Trade Zone, China
Tel:86-0579-89986543 Fax:86-0579-89986547 Hot Line:400 6789 666
Website:http://www.cttlab.com Email:enquiry@cttlab.com

Test Requested and Conclusion(s):

No.	Standard and Requirement	Conclusion(s)
1	CM/Res(2013)9 on metals and alloys used in food contact materials and articles. - Specific Release of 23 Metals	PASS
2	German food, Articles of Daily Use and Feed Code (LFGB), section 30&31, and BfR Recommendations on silicone used in food contact materials and articles - Extractives 10% ethanol - Extractives 3%acetic acid - Extractives Distilled water - Peroxides - Volatile Organic Matter(VOM)	PASS
3	German food, Articles of Daily Use and Feed Code (LFGB), section 30&31, and BfR Recommendations. - Total Platinum	PASS
4	COMMISSION REGULATION (EU) 2020/1245 of 2 September 2020 amending and correcting Regulation (EU) No 10/2011 on plastic materials and articles intended to come into contact with food. - Migration of Heavy metal - Overall Migration	PASS
5	German food, Articles of Daily Use and Feed Code (LFGB), section 30&31, and BfR Recommendations - Sensory requirements	PASS

This test report is issued by the company subject to its General Conditions of Services and accessible at http://www.cttlab.com/order/20210319090829016 6.pdf. The sample is provided by the applicant, our company is not responsible for the integrity, authenticity and identification information of the sample. Unless otherwise stated the results shown in this report only apply to the sample as received. Without prior written permission of the company, this test report cannot be reproduced, except in full. Any inquiry about this report, please raise from the date of receipt of the report within 30 days, overdue will not be accept. Items marked with "n" means they are not accredited by CNAS (if with CNAS logo), "s" means the item of subcontractor. All or part of items of this report are not in the accredited scope of CMA and cannot be as domestic social impartiality proof data.

Test Result(s):

Specific Release of 23 Metals - Council of Europe Resolution CM/Res(2013)9 on metals and alloys used in food contact materials and articles.

Method: EDQM Technical Guide Resolution CM/Res(2013)9, analyzed by Inductively coupled plasma mass spectrometry（ICP-MS） or Inductively Coupled Plasma Optical Emission Spectrometer（ICP-OES）.

Elements	SRL (mg/kg)		Result (mg/kg)		Conclusion
	1st + 2nd	3rd	3*		
			1st + 2nd	3rd	
Tin(Sn)	700	100	< 2	< 1	PASS
Copper(Cu)	28	4	< 2	<1	
Iron(Fe)	280	40	< 2	< 1	
Manganese(Mn)	12.6	1.8	< 0.2	< 0.1	
Zinc(Zn)	35	5	< 2	< 1	
Aluminum(Al)	35	5	< 2	<1	
Barium(Ba)	8.4	1.2	< 0.2	< 0.1	
Titanium(Ti)	--	--	< 2	< 1	
Magnesium(Mg)	--	--	< 2	< 1	
Chromium(Cr)	1.750	0.250	< 0.100	< 0.050	
Nickel(Ni)	0.98	0.14	< 0.10	< 0.05	
Lithium(Li)	0.336	0.048	< 0.020	< 0.010	
Beryllium(Be)	0.07	0.01	< 0.002	< 0.001	
Vanadium(V)	0.07	0.01	< 0.002	< 0.001	
Cobalt(Co)	0.14	0.02	< 0.002	< 0.001	
Molybdenum(Mo)	0.84	0.12	< 0.02	< 0.01	
Silver(Ag)	0.56	0.08	< 0.02	< 0.01	
Antimony(Sb)	0.28	0.04	< 0.02	< 0.01	
Lead(Pb)	0.07	0.01	< 0.002	< 0.001	
Arsenic(As)	0.014	0.002	< 0.002	< 0.001	
Cadmium(Cd)	0.035	0.005	< 0.002	< 0.001	
Mercury(Hg)	0.021	0.003	< 0.002	< 0.001	
Thallium(Tl)	0.0007	0.0001	< 0.0002	< 0.0001	

Note: 1. "--" = No requirement.

2. mg/kg = milligrams of the constituents released per kilogram of foodstuff.

This test report is issued by the company subject to its General Conditions of Services and accessible at http://www.cttlab.com/order/20210319090829016 6.pdf. The sample is provided by the applicant, our company is not responsible for the integrity, authenticity and identification information of the sample. Unless otherwise stated the results shown in this report only apply to the sample as received. Without prior written permission of the company, this test report cannot be reproduced, except in full. Any inquiry about this report, please raise from the date of receipt of the report within 30 days, overdue will not be accept. Items marked with "n" means they are not accredited by CNAS (if with CNAS logo), "s" means the item of subcontractor. All or part of items of this report are not in the accredited scope of CMA and cannot be as domestic social impartiality proof data.

3. SRL = Specific Release Limit.
4. Test condition: Artificial tap water at 70℃ for 2 hours +40℃ for 24 hours.
5. "*" = The test sample(s) is received on Aug. 15, 2023.

Test Result(s):

Extractives 10% ethanol - German food, Articles of Daily Use and Feed Code (LFGB), section 30&31, and BfR Recommendations.

Method: With reference to 61st Communication on testing of plastics in Bundesgesundheitsbl 46(2003) 362.

Material No.	Test Condition	Test Item	Reporting Limit (%)	Limit (%)	Result (%)	Conclusion
4	10% Ethanol(v/v), Refluxing ,5h	10% Ethanol(v/v)	0.10	0.50	N.D.	PASS

NOTE: 1. % = percentage.
2. N.D. = Not Detected (Less than Reporting Limit).

Test Result(s):

Extractives 3% acetic acid - German food, Articles of Daily Use and Feed Code (LFGB), section 30&31, and BfR Recommendations.

Method: With reference to 61st Communication on testing of plastics in Bundesgesundheitsbl 46(2003) 362.

Material No.	Test Condition	Test Item	Reporting Limit (%)	Limit (%)	Result (%)	Conclusion
4	3% Acetic acid(w/v), Refluxing ,5h	3% Acetic acid(w/v)	0.10	0.50	N.D.	PASS

NOTE: 1. % = percentage.
2. N.D. = Not Detected (Less than Reporting Limit).

This test report is issued by the company subject to its General Conditions of Services and accessible at http://www.cttlab.com/order/20210319090829016 6.pdf. The sample is provided by the applicant, our company is not responsible for the integrity, authenticity and identification information of the sample. Unless otherwise stated the results shown in this report only apply to the sample as received. Without prior written permission of the company, this test report cannot be reproduced, except in full. Any inquiry about this report, please raise from the date of receipt of the report within 30 days, overdue will not be accept. Items marked with "n" means they are not accredited by CNAS (if with CNAS logo), "s" means the item of subcontractor. All or part of items of this report are not in the accredited scope of CMA and cannot be as domestic social impartiality proof data.

Test Result(s):

Volatile Organic Matter(VOM) - German food, Articles of Daily Use and Feed Code (LFGB), section 30&31, and BfR Recommendations.

Method: Bundesgesundheitsbl 46 (2003) 362

Material No.	Test Item	Reporting Limit (%)	Limit (%)	Result (%)	Conclusion
4	Volatile Organic Matter(VOM)	0.10	0.50	N.D.	PASS

NOTE: 1. % = percentage.
2. N.D. = Not Detected (Less than Reporting Limit).

Test Result(s):

Extractives Distilled water - German food, Articles of Daily Use and Feed Code (LFGB), section 30&31, and BfR Recommendations.

Method: With reference to 61st Communication on testing of plastics in Bundesgesundheitsbl 46(2003) 362.

Material No.	Test Condition	Test Item	Reporting Limit (%)	Limit (%)	Result (%)	Conclusion
4	Distilled water , Refluxing ,5h	Distilled water	0.10	0.50	N.D.	PASS

NOTE: 1. % = percentage.
2. N.D. = Not Detected (Less than Reporting Limit).

Test Result(s):

Peroxides - German food, Articles of Daily Use and Feed Code (LFGB), section 30&31, and BfR Recommendations.

Method: Bundesgesundheitsblatt 40 (1997) 412

Material No.	Test Item	Limit	Result	Conclusion
4	Peroxide residues	Absent	Absent	PASS

This test report is issued by the company subject to its General Conditions of Services and accessible at http://www.cttlab.com/order/20210319090829016 6.pdf. The sample is provided by the applicant, our company is not responsible for the integrity, authenticity and identification information of the sample. Unless otherwise stated the results shown in this report only apply to the sample as received. Without prior written permission of the company, this test report cannot be reproduced, except in full. Any inquiry about this report, please raise from the date of receipt of the report within 30 days, overdue will not be accept. Items marked with "n" means they are not accredited by CNAS (if with CNAS logo), "s" means the item of subcontractor. All or part of items of this report are not in the accredited scope of CMA and cannot be as domestic social impartiality proof data.

Test Result(s):

Total Platinum - German food, Articles of Daily Use and Feed Code (LFGB), section 30&31, and BfR Recommendations.

Method: Acid digestion method, analyzed by Inductively Coupled Plasma Optical Emission Spectrometer （ICP-OES）.

Substances	Total Platinum	**Conclusion**
CAS No.	7440-06-4	
Reporting Limit (mg/kg)	10	
Limit (mg/kg)	50	
Material No.	**Result (mg/kg)**	
4	N.D.	PASS

NOTE: 1. mg/kg = milligram per kilogram (ppm).
2. N.D. = Not Detected (Less than Reporting Limit).

Test Result(s):

Overall Migration - COMMISSION REGULATION (EU) 2020/1245 of 2 September 2020 amending and correcting Regulation (EU) No 10/2011 on plastic materials and articles intended to come into contact with food.

Method: EN 1186-1:2002&EN 1186-3:2022

Material No.	**Test Condition**	**Test Item**	**Reporting Limit (mg/dm^2)**	**Limit (mg/dm^2)**	**Result (mg/dm^2)**	**Conclusion**
1	20% Ethanol(v/v),70°C,2h	Overall Migration (1st)	3	--	N.D.	PASS
1	3% Acetic acid(w/v),70°C,2h	Overall Migration (1st)	3	--	N.D.	PASS
1	20% Ethanol(v/v),70°C,2h	Overall Migration (2nd)	3	--	N.D.	PASS
1	3% Acetic acid(w/v),70°C,2h	Overall Migration (2nd)	3	--	N.D.	PASS
1	20% Ethanol(v/v),70°C,2h	Overall Migration (3rd)	3	10	N.D.	PASS

This test report is issued by the company subject to its General Conditions of Services and accessible at http://www.cttlab.com/order/20210319090829016 6.pdf. The sample is provided by the applicant, our company is not responsible for the integrity, authenticity and identification information of the sample. Unless otherwise stated the results shown in this report only apply to the sample as received. Without prior written permission of the company, this test report cannot be reproduced, except in full. Any inquiry about this report, please raise from the date of receipt of the report within 30 days, overdue will not be accept. Items marked with "n" means they are not accredited by CNAS (if with CNAS logo), "s" means the item of subcontractor. All or part of items of this report are not in the accredited scope of CMA and cannot be as domestic social impartiality proof data.

1	3% Acetic acid(w/v),70°C,2h	Overall Migration (3rd)	3	10	N.D.	PASS
2	20% Ethanol(v/v),70°C,2h	Overall Migration (1st)	3	--	N.D.	PASS
2	3% Acetic acid(w/v),70°C,2h	Overall Migration (1st)	3	--	N.D.	PASS
2	20% Ethanol(v/v),70°C,2h	Overall Migration (2nd)	3	--	N.D.	PASS
2	3% Acetic acid(w/v),70°C,2h	Overall Migration (2nd)	3	--	N.D.	PASS
2	20% Ethanol(v/v),70°C,2h	Overall Migration (3rd)	3	10	N.D.	PASS
2	3% Acetic acid(w/v),70°C,2h	Overall Migration (3rd)	3	10	N.D.	PASS

NOTE:

1. mg/dm^2 = milligram per square decimeter.
2. N.D. = Not Detected (Less than Reporting Limit).
3. The material or article is intended to come into repeated contact with foods, the migration test(s) shall be carried out three times. The results of subsequent migrations must not exceed the previous ones and the determination of compliance is based on the third migration result.

This test report is issued by the company subject to its General Conditions of Services and accessible at http://www.cttlab.com/order/20210319090829016 6.pdf. The sample is provided by the applicant, our company is not responsible for the integrity, authenticity and identification information of the sample. Unless otherwise stated the results shown in this report only apply to the sample as received. Without prior written permission of the company, this test report cannot be reproduced, except in full. Any inquiry about this report, please raise from the date of receipt of the report within 30 days, overdue will not be accept. Items marked with "n" means they are not accredited by CNAS (if with CNAS logo), "s" means the item of subcontractor. All or part of items of this report are not in the accredited scope of CMA and cannot be as domestic social impartiality proof data.

Test Result(s):

Migration of Heavy metal - COMMISSION REGULATION (EU) 2020/1245 of 2 September 2020 amending and correcting Regulation (EU) No 10/2011 on plastic materials and articles intended to come into contact with food.

Method: BS EN 13130-1:2004, analyzed by Inductively coupled plasma mass spectrometry（ICP-MS） or Inductively Coupled Plasma Optical Emission Spectrometer（ICP-OES）.

No.	Elements	Limit (mg/kg)	Results (mg/kg)		
			1		
			1st	2nd	3rd
1	Barium(Ba)	1	＜0.1	＜0.1	＜0.1
2	Cobalt (Co)	0.05	＜0.05	＜0.05	＜0.05
3	Copper (Cu)	5	＜0.5	＜0.5	＜0.5
4	Iron (Fe)	48	＜1	＜1	＜1
5	Lithium (Li)	0.6	＜0.1	＜0.1	＜0.1
6	Manganese (Mn)	0.6	＜0.05	＜0.05	＜0.05
7	Zinc (Zn)	5	＜1	＜1	＜1
8	Aluminium (Al)	1	＜0.1	＜0.1	＜0.1
9	Nickel(Ni)	0.02	＜0.01	＜0.01	＜0.01
10	Lead(Pb)	0.01	＜0.01	＜0.01	＜0.01
11	Cadmium(Cd)	0.002	＜0.002	＜0.002	＜0.002
12	Arsenic(As)	0.01	＜0.01	＜0.01	＜0.01
13	Mercury(Hg)	0.01	＜0.01	＜0.01	＜0.01
14	Chromium (Cr)	0.01	＜0.01	＜0.01	＜0.01
15	Antimony(Sb)	0.04	＜0.02	＜0.02	＜0.02
16	Europium(Eu)	0.05	＜0.01	＜0.01	＜0.01
17	Gadolinium(Gd)				
18	Lanthanum(La)				
19	Terbium(Tb)				
Conclusion			PASS		

This test report is issued by the company subject to its General Conditions of Services and accessible at http://www.cttlab.com/order/20210319090829016 6.pdf. The sample is provided by the applicant, our company is not responsible for the integrity, authenticity and identification information of the sample. Unless otherwise stated the results shown in this report only apply to the sample as received. Without prior written permission of the company, this test report cannot be reproduced, except in full. Any inquiry about this report, please raise from the date of receipt of the report within 30 days, overdue will not be accept. Items marked with "n" means they are not accredited by CNAS (if with CNAS logo), "s" means the item of subcontractor. All or part of items of this report are not in the accredited scope of CMA and cannot be as domestic social impartiality proof data.

No.	Elements	Limit (mg/kg)	Results (mg/kg)		
			2		
			1st	2nd	3rd
1	Barium(Ba)	1	＜0.1	＜0.1	＜0.1
2	Cobalt (Co)	0.05	＜0.05	＜0.05	＜0.05
3	Copper (Cu)	5	＜0.5	＜0.5	＜0.5
4	Iron (Fe)	48	＜1	＜1	＜1
5	Lithium (Li)	0.6	＜0.1	＜0.1	＜0.1
6	Manganese (Mn)	0.6	＜0.05	＜0.05	＜0.05
7	Zinc (Zn)	5	＜1	＜1	＜1
8	Aluminium (Al)	1	＜0.1	＜0.1	＜0.1
9	Nickel(Ni)	0.02	＜0.01	＜0.01	＜0.01
10	Lead(Pb)	0.01	＜0.01	＜0.01	＜0.01
11	Cadmium(Cd)	0.002	＜0.002	＜0.002	＜0.002
12	Arsenic(As)	0.01	＜0.01	＜0.01	＜0.01
13	Mercury(Hg)	0.01	＜0.01	＜0.01	＜0.01
14	Chromium (Cr)	0.01	＜0.01	＜0.01	＜0.01
15	Antimony(Sb)	0.04	＜0.02	＜0.02	＜0.02
16	Europium(Eu)	0.05	＜0.01	＜0.01	＜0.01
17	Gadolinium(Gd)				
18	Lanthanum(La)				
19	Terbium(Tb)				
Conclusion			PASS		

Note:
1. Test Condition：3% Acetic acid(w/v),70℃ for 2 hours.
2. mg/kg = milligrams of the constituents released per kilogram of foodstuff.
3. The results of the three migration tests should show a decreasing trend, and the results of the third test should be used to determine the compliance.

This test report is issued by the company subject to its General Conditions of Services and accessible at http://www.cttlab.com/order/20210319090829016 6.pdf. The sample is provided by the applicant, our company is not responsible for the integrity, authenticity and identification information of the sample. Unless otherwise stated the results shown in this report only apply to the sample as received. Without prior written permission of the company, this test report cannot be reproduced, except in full. Any inquiry about this report, please raise from the date of receipt of the report within 30 days, overdue will not be accept. Items marked with "n" means they are not accredited by CNAS (if with CNAS logo), "s" means the item of subcontractor. All or part of items of this report are not in the accredited scope of CMA and cannot be as domestic social impartiality proof data.

Test Report

Test Result(s):

Sensory requirements - German food, Articles of Daily Use and Feed Code (LFGB), section 30&31, and BfR Recommendations

Method: DIN 10955:2004

Material No.	Test Item	Requirement	Result	Conclusion
5*	Sensorial examination odour	3	2	PASS
5*	Sensorial examination taste	3	0	PASS

NOTE: 1. Scale evaluation:

0: No perceptible odour
1: Odour just perceptible (still difficult to define)
2: Moderate odour
3: Moderately strong odour
4: Strong odour

2. "*" = The test sample(s) is received on Aug. 15, 2023.

Note: All results in this report quoted from CTT2307032538ENR1 according to the client's requirements.

Test Material List

Material No.	Sample Description	Location
1	White plastic	Inside of lid
2	Black plastic	Cup mouth spiral mouth
3	Silvery metal	Cup inside
4	White translucence silicone	Seal ring
5	Cup	Cup individual

This test report is issued by the company subject to its General Conditions of Services and accessible at http://www.cttlab.com/order/20210319090829016 6.pdf. The sample is provided by the applicant, our company is not responsible for the integrity, authenticity and identification information of the sample. Unless otherwise stated the results shown in this report only apply to the sample as received. Without prior written permission of the company, this test report cannot be reproduced, except in full. Any inquiry about this report, please raise from the date of receipt of the report within 30 days, overdue will not be accept. Items marked with "n" means they are not accredited by CNAS (if with CNAS logo), "s" means the item of subcontractor. All or part of items of this report are not in the accredited scope of CMA and cannot be as domestic social impartiality proof data.

Photo of Sample:



End of Report

This test report is issued by the company subject to its General Conditions of Services and accessible at http://www.cttlab.com/order/20210319090829016 6.pdf. The sample is provided by the applicant, our company is not responsible for the integrity, authenticity and identification information of the sample. Unless otherwise stated the results shown in this report only apply to the sample as received. Without prior written permission of the company, this test report cannot be reproduced, except in full. Any inquiry about this report, please raise from the date of receipt of the report within 30 days, overdue will not be accept. Items marked with "n" means they are not accredited by CNAS (if with CNAS logo), "s" means the item of subcontractor. All or part of items of this report are not in the accredited scope of CMA and cannot be as domestic social impartiality proof data.

Zhejiang Consumer Testing Technology Co., Ltd.

1st-3rd Floor, Building 5, Block B, Innovation Entrepreneurship Street, No. E21, Xinke Road, Choujiang District, Yiwu, Jinhua, Zhejiang, Pilot Free Trade Zone, China

Tel:86-0579-89986543 Fax:86-0579-89986547 Hot Line:400 6789 666

Website:http://www.cttlab.com Email:enquiry@cttlab.com