中国认可
国际互认
检测
TESTING
CNAS L6478

TEST REPORT

Report No.	:	WTZ23F05109707R1T
Applicant	:	Jiangmen City Xinhui HengLong Innovative Housewares Co., Ltd.
Address	:	Folk Enterprise Industrial Park, Huicheng,Xinhui, Jiangmen, Guangdong, P.R.China
Manufacturer	:	Jiangmen City Xinhui HengLong Innovative Housewares Co., Ltd.
Address	:	Folk Enterprise Industrial Park, Huicheng,Xinhui, Jiangmen, Guangdong, P.R.China
Sample Name	:	Coffee Machine
Sample Model	:	HLK-02
Test Requested	:	In accordance with German Food, Articles of Daily Use and Feed Code of September 1, 2005(LFGB) Section 30 & 31, BfR recommendation and Regulation (EC) No 1935/2004.
Test Conclusion	:	**Pass** (Please refer to next pages for details)
Date of Receipt sample	:	2023-05-22 & 2023-05-31
Testing period	:	2023-05-22 to 2023-05-26 & 2023-05-31 to 2023-06-05
Date of Issue	:	2023-06-06
Test Result	:	Refer to next page (s)
Note	:	Selected test(s) as requested by applicant

Prepared By:

Waltek Testing Group (Foshan) Co., Ltd.

Address: No.13-19, 2/F., 2nd Building, Sunlink International Machinery City,
Chencun, Shunde District, Foshan, Guangdong, China
Tel:+86-757-23811398 Fax:+86-757-23811381 E-mail:info@waltek.com.cn

Signed for and on behalf of
Waltek Testing Group (Foshan) Co., Ltd.

Jessise Liu

Jessise.Liu

Test Results:

1. Extractable Lead, Cadmium and Cobalt Content

Test Items	Result (mg/L)	LOQ (mg/L)	Limit (mg/L)
	No.1		
Extractable Lead	ND	0.1	1.5
Extractable Cadmium	ND	0.01	0.1
Extractable Cobalt*	ND	0.02	0.05

Note:

1. Test method: With reference to BS EN 1388-1: 1996 and BS EN 1388-2: 1996, sample preparation in 4% acetic acid at 22±2°C for 24 hours, analysis was performed by ICP-MS.
2. “mg/L” = milligram per litre
3. LOQ = Limit of quantitation
4. ND = Not Detected or lower than limit of quantitation
5. The specification was quoted from DIN 51032-2017 and ALS Opinion Number 2017/15.
6. The testing item marked with ‘*’ does not been accredited by CNAS.

2. Council of Europe Resolution CM/Res(2013)9-Specific Migration of Heavy Metal

Test Items	1st+2nd Migration (mg/kg)		LOQ (mg/kg)	Limit (mg/kg)
	No.2	No.3		
Aluminium (Al)	ND	0.4	0.2	35
Antimony (Sb)	ND	ND	0.02	0.28
Chromium (Cr)	ND	ND	0.04	1.75
Cobalt (Co)	ND	ND	0.02	0.14
Copper (Cu)	ND	ND	0.2	28
Iron (Fe)	ND	ND	0.4	280
Manganese (Mn)	ND	ND	0.2	12.6
Molybdenum (Mo)	ND	ND	0.02	0.84
Nickel (Ni)	ND	ND	0.02	0.98
Silver (Ag)	ND	ND	0.02	0.56
Tin (Sn)	ND	ND	0.2	700
Vanadium (V)	ND	ND	0.01	0.07
Zinc (Zn)	ND	ND	0.2	35
Arsenic (As)	ND	ND	0.002	0.014
Barium (Ba)	ND	ND	0.2	8.4
Beryllium (Be)	ND	ND	0.01	0.07
Cadmium (Cd)	ND	ND	0.002	0.035
Lead (Pb)	ND	ND	0.01	0.07
Lithium (Li)	ND	ND	0.01	0.336
Mercury (Hg)	ND	ND	0.002	0.021
Thallium (Tl)	ND	ND	0.0002	0.0007
Magnesium (Mg)	ND	ND	0.2	--
Titanium (Ti)	ND	ND	0.02	--

Test Items	3rd Migration (mg/kg)		LOQ (mg/kg)	Limit (mg/kg)
	No.2	No.3		
Aluminium (Al)	ND	0.3	0.1	5
Antimony (Sb)	ND	ND	0.01	0.04
Chromium (Cr)	ND	ND	0.02	0.25
Cobalt (Co)	ND	ND	0.01	0.02
Copper (Cu)	ND	ND	0.1	4
Iron (Fe)	ND	ND	0.2	40
Manganese (Mn)	ND	ND	0.1	1.8
Molybdenum (Mo)	ND	ND	0.01	0.12
Nickel (Ni)	ND	ND	0.01	0.14
Silver (Ag)	ND	ND	0.01	0.08
Tin (Sn)	ND	ND	0.1	100
Vanadium (V)	ND	ND	0.005	0.01
Zinc (Zn)	ND	ND	0.1	5
Arsenic (As)	ND	ND	0.001	0.002
Barium (Ba)	ND	ND	0.1	1.2
Beryllium (Be)	ND	ND	0.005	0.01
Cadmium (Cd)	ND	ND	0.001	0.005
Lead (Pb)	ND	ND	0.005	0.01
Lithium (Li)	ND	ND	0.005	0.048
Mercury (Hg)	ND	ND	0.001	0.003
Thallium (Tl)	ND	ND	0.0001	0.0001
Magnesium (Mg)	ND	ND	0.1	--
Titanium (Ti)	ND	ND	0.01	--

Note:

1. Test Method: With reference to BS EN 13130-1: 2004, analysis was performed by ICP-MS.
2. Test Condition and simulant: Sample(s) were migrated with artificial tap water at 100°C for 1 hour.
3. “mg/kg” = milligram per kilogram of foodstuff in contact with
4. LOQ = Limit of quantitation
5. ND = Not Detected or lower than limit of quantitation
6. “--” = Not regulated
7. The specification was quoted from Technical Guide on Metals and alloys used in food contact materials of Council of Europe Resolution CM/Res(2013)9.

3. Overall Migration Test

Food Simulant	Test Condition	Result (mg/dm^2)			LOQ (mg/dm^2)	Limit (mg/dm^2)
		No.4				
		1st Migration	2nd Migration	3rd Migration		
20% Ethanol	100°C for 1 hour	3.0	ND	ND	3.0	3rd Migration:10, 3rd<2nd<1st

Food Simulant	Test Condition	Result (mg/dm^2)			LOQ (mg/dm^2)	Limit (mg/dm^2)
		No.5				
		1st Migration	2nd Migration	3rd Migration		
20% Ethanol	100°C for 1 hour	ND	ND	ND	3.0	3rd Migration:10, 3rd<2nd<1st

Food Simulant	Test Condition	Result (mg/dm^2)			LOQ (mg/dm^2)	Limit (mg/dm^2)
		No.6				
		1st Migration	2nd Migration	3rd Migration		
20% Ethanol	100°C for 1 hour	ND	ND	ND	3.0	3rd Migration:10, 3rd<2nd<1st

Note:

1. Test method: With reference to BS EN 1186-1: 2002, BS EN 1186-3: 2022
2. "mg/dm^2" = milligram per square decimetre
3. "°C" = Celsius degree
4. LOQ = Limit of quantitation
5. ND = Not Detected or lower than limit of quantitation
6. The specification was quoted from (EU) No 10/2011 and its amendments (EU) 2016/1416, (EU) 2017/752, (EU) 2019/37 and (EU) 2020/1245.

4. Specific Migration of heavy metal

Test Items	Result(mg/kg)			LOQ (mg/kg)	Limit (mg/kg)	
	No.4					
	1st Migration	2nd Migration	3rd Migration			
Nickel (Ni)	ND	ND	ND	0.01	3rd Migration:0.02, 3rd<2nd<1st	
Aluminium (Al)	ND	ND	ND	0.1	3rd Migration:1 3rd<2nd<1st	
Barium (Ba)	ND	ND	ND	0.1	3rd Migration:1 3rd<2nd<1st	
Cobalt (Co)	ND	ND	ND	0.01	3rd Migration:0.05 3rd<2nd<1st	
Copper (Cu)	ND	ND	ND	0.1	3rd Migration:5 3rd<2nd<1st	
Iron (Fe)	ND	ND	ND	0.1	3rd Migration:48 3rd<2nd<1st	
Lithium (Li)	ND	ND	ND	0.01	3rd Migration:0.6 3rd<2nd<1st	
Manganese (Mn)	ND	ND	ND	0.01	3rd Migration:0.6 3rd<2nd<1st	
Zinc (Zn)	ND	ND	ND	0.1	3rd Migration:5 3rd<2nd<1st	
Antimony (Sb)	ND	ND	ND	0.01	3rd Migration:0.04 3rd<2nd<1st	
Arsenic (As)	ND	ND	ND	0.01	Not detected	
Cadmium (Cd)	ND	ND	ND	0.002	Not detected	
Chromium (Cr)	ND	ND	ND	0.01	Not detected	
Mercury (Hg)	ND	ND	ND	0.01	Not detected	
Lead (Pb)	ND	ND	ND	0.01	Not detected	
Europeum (Eu)	ND	ND	ND	0.02	3rd Migration:0.05 3rd<2nd<1st	Sum< 0.05
Gadolinium (Gd)	ND	ND	ND	0.02	3rd Migration:0.05 3rd<2nd<1st	
Lanthanum (La)	ND	ND	ND	0.02	3rd Migration:0.05 3rd<2nd<1st	
Terbium (Tb)	ND	ND	ND	0.02	3rd Migration:0.05 3rd<2nd<1st	

Test Items	Result(mg/kg)			LOQ (mg/kg)	Limit (mg/kg)	
	No.5					
	1st Migration	2nd Migration	3rd Migration			
Nickel (Ni)	ND	ND	ND	0.01	3rd Migration:0.02, 3rd<2nd<1st	
Aluminium (Al)	ND	ND	ND	0.1	3rd Migration:1 3rd<2nd<1st	
Barium (Ba)	ND	ND	ND	0.1	3rd Migration:1 3rd<2nd<1st	
Cobalt (Co)	ND	ND	ND	0.01	3rd Migration:0.05 3rd<2nd<1st	
Copper (Cu)	ND	ND	ND	0.1	3rd Migration:5 3rd<2nd<1st	
Iron (Fe)	ND	ND	ND	0.1	3rd Migration:48 3rd<2nd<1st	
Lithium (Li)	ND	ND	ND	0.01	3rd Migration:0.6 3rd<2nd<1st	
Manganese (Mn)	ND	ND	ND	0.01	3rd Migration:0.6 3rd<2nd<1st	
Zinc (Zn)	ND	ND	ND	0.1	3rd Migration:5 3rd<2nd<1st	
Antimony (Sb)	ND	ND	ND	0.01	3rd Migration:0.04 3rd<2nd<1st	
Arsenic (As)	ND	ND	ND	0.01	Not detected	
Cadmium (Cd)	ND	ND	ND	0.002	Not detected	
Chromium (Cr)	ND	ND	ND	0.01	Not detected	
Mercury (Hg)	ND	ND	ND	0.01	Not detected	
Lead (Pb)	ND	ND	ND	0.01	Not detected	
Europeum (Eu)	ND	ND	ND	0.02	3rd Migration:0.05 3rd<2nd<1st	Sum< 0.05
Gadolinium (Gd)	ND	ND	ND	0.02	3rd Migration:0.05 3rd<2nd<1st	
Lanthanum (La)	ND	ND	ND	0.02	3rd Migration:0.05 3rd<2nd<1st	
Terbium (Tb)	ND	ND	ND	0.02	3rd Migration:0.05 3rd<2nd<1st	

Test Items	Result(mg/kg)			LOQ (mg/kg)	Limit (mg/kg)	
	No.6					
	1st Migration	2nd Migration	3rd Migration			
Nickel (Ni)	ND	ND	ND	0.01	3rd Migration:0.02, 3rd<2nd<1st	
Aluminium (Al)	ND	ND	ND	0.1	3rd Migration:1 3rd<2nd<1st	
Barium (Ba)	ND	ND	ND	0.1	3rd Migration:1 3rd<2nd<1st	
Cobalt (Co)	ND	ND	ND	0.01	3rd Migration:0.05 3rd<2nd<1st	
Copper (Cu)	ND	ND	ND	0.1	3rd Migration:5 3rd<2nd<1st	
Iron (Fe)	ND	ND	ND	0.1	3rd Migration:48 3rd<2nd<1st	
Lithium (Li)	ND	ND	ND	0.01	3rd Migration:0.6 3rd<2nd<1st	
Manganese (Mn)	ND	ND	ND	0.01	3rd Migration:0.6 3rd<2nd<1st	
Zinc (Zn)	ND	ND	ND	0.1	3rd Migration:5 3rd<2nd<1st	
Antimony (Sb)	ND	ND	ND	0.01	3rd Migration:0.04 3rd<2nd<1st	
Arsenic (As)	ND	ND	ND	0.01	Not detected	
Cadmium (Cd)	ND	ND	ND	0.002	Not detected	
Chromium (Cr)	ND	ND	ND	0.01	Not detected	
Mercury (Hg)	ND	ND	ND	0.01	Not detected	
Lead (Pb)	ND	ND	ND	0.01	Not detected	
Europeum (Eu)	ND	ND	ND	0.02	3rd Migration:0.05 3rd<2nd<1st	Sum< 0.05
Gadolinium (Gd)	ND	ND	ND	0.02	3rd Migration:0.05 3rd<2nd<1st	
Lanthanum (La)	ND	ND	ND	0.02	3rd Migration:0.05 3rd<2nd<1st	
Terbium (Tb)	ND	ND	ND	0.02	3rd Migration:0.05 3rd<2nd<1st	

Note:

1. Test Method: With reference to BS EN 13130-1: 2004, sample preparation in 3% acetic acid at 100°C for 1 hour, analysis was performed by ICP-MS.
2. “mg/kg” = milligram per kilogram of foodstuff in contact with
3. LOQ = Limit of quantitation
4. ND = Not Detected or lower than limit of quantitation
5. The specification was quoted from (EU) No 10/2011 and its amendments (EU) 2016/1416, (EU) 2017/752 and (EU) 2020/1245.

5. Specific Migration of Primary Aromatic Amines

Test Item	Result (mg/kg)			LOQ (mg/kg)	Limit (mg/kg)
	No.4				
	1st Migration	2nd Migration	3rd Migration		
Migration of Primary aromatic amines	ND	ND	ND	0.01	Not detected

Test Item	Result (mg/kg)			LOQ (mg/kg)	Limit (mg/kg)
	No.5				
	1st Migration	2nd Migration	3rd Migration		
Migration of Primary aromatic amines	ND	ND	ND	0.01	Not detected

Test Item	Result (mg/kg)			LOQ (mg/kg)	Limit (mg/kg)
	No.6				
	1st Migration	2nd Migration	3rd Migration		
Migration of Primary aromatic amines	ND	ND	ND	0.01	Not detected

Note:

1. Test Method: With reference to § 64 LFGB L No. 00.00-6, analysis was performed by UV-visible Spectrometer.
2. Test Condition and simulant: 3% acetic acid at 100°C for 1 hour.
3. “mg/kg” = milligram per kilogram of foodstuff in contact with
4. LOQ = Limit of quantitation
5. ND = Not Detected or lower than limit of quantitation
6. The specification was quoted from (EU) No 10/2011 and its amendments (EU) 2016/1416, (EU) 2017/752 and (EU) 2020/1245.

6. Specific Migration of Primary Aromatic Amines (single substance)*

Test Items	CAS No.	Result(mg/kg)			LOQ (mg/kg)	Limit (mg/kg)
		No.4				
		1st Migration	2nd Migration	3rd Migration		
2-methoxyaniline	90-04-0	ND	ND	ND	0.002	Not Detected
4,4'-Diaminobiphenyl	92-87-5	ND	ND	ND	0.002	Not Detected
4,4'-Methylen-bis-(2-chloroaniline)	101-14-4	ND	ND	ND	0.002	Not Detected
4,4'-Diaminodiphenylmethane	101-77-9	ND	ND	ND	0.002	Not Detected
4,4'-Oxydianiline	101-80-4	ND	ND	ND	0.002	Not Detected
4-chloroaniline	106-47-8	ND	ND	ND	0.002	Not Detected
3,3'-Dimethoxybenzidine	119-90-4	ND	ND	ND	0.002	Not Detected
3,3'-Dimethylbenzidine	119-93-7	ND	ND	ND	0.002	Not Detected
2-Methoxy-5-methylaniline	120-71-8	ND	ND	ND	0.002	Not Detected
2,4,5 – Trimethylaniline	137-17-7	ND	ND	ND	0.002	Not Detected
4,4'-Thiodianiline	139-65-1	ND	ND	ND	0.002	Not Detected
4-aminoazobenzene	60-09-3	ND	ND	ND	0.002	Not Detected
2,4-diaminoanisol	615-05-4	ND	ND	ND	0.002	Not Detected
4,4'-diamino-3,3'-dimethyldiphenylmethane	838-88-0	ND	ND	ND	0.002	Not Detected
2-Naphthylamine	91-59-8	ND	ND	ND	0.002	Not Detected
3,3'-Dichlorobenzidine	91-94-1	ND	ND	ND	0.002	Not Detected
4-Aminobiphenyl	92-67-1	ND	ND	ND	0.002	Not Detected
2-methylaniline	95-53-4	ND	ND	ND	0.002	Not Detected
4-chloro-o-Toluidine	95-69-2	ND	ND	ND	0.002	Not Detected
2,4-Toluylendiamine	95-80-7	ND	ND	ND	0.002	Not Detected
2,4-Aminoazotoluene	97-56-3	ND	ND	ND	0.002	Not Detected
2-Amino-4-nitrotoluene	99-55-8	ND	ND	ND	0.002	Not Detected
2,4-Xylidin	95-68-1	ND	ND	ND	0.002	Not Detected
2,6-Xylidin	87-62-7	ND	ND	ND	0.002	Not Detected
1, 3 - phenylene diamine	108-45-2	ND	ND	ND	0.002	Not Detected

Test Items	CAS No.	Result(mg/kg)			LOQ (mg/kg)	Limit (mg/kg)
		No.5				
		1st Migration	2nd Migration	3rd Migration		
2-methoxyaniline	90-04-0	ND	ND	ND	0.002	Not Detected
4,4'-Diaminobiphenyl	92-87-5	ND	ND	ND	0.002	Not Detected
4,4'-Methylen-bis-(2-chloroaniline)	101-14-4	ND	ND	ND	0.002	Not Detected
4,4'-Diaminodiphenylmethane	101-77-9	ND	ND	ND	0.002	Not Detected
4,4'-Oxydianiline	101-80-4	ND	ND	ND	0.002	Not Detected
4-chloroaniline	106-47-8	ND	ND	ND	0.002	Not Detected
3,3'-Dimethoxybenzidine	119-90-4	ND	ND	ND	0.002	Not Detected
3,3'-Dimethylbenzidine	119-93-7	ND	ND	ND	0.002	Not Detected
2-Methoxy-5-methylaniline	120-71-8	ND	ND	ND	0.002	Not Detected
2,4,5 – Trimethylaniline	137-17-7	ND	ND	ND	0.002	Not Detected
4,4'-Thiodianiline	139-65-1	ND	ND	ND	0.002	Not Detected
4-aminoazobenzene	60-09-3	ND	ND	ND	0.002	Not Detected
2,4-diaminoanisol	615-05-4	ND	ND	ND	0.002	Not Detected
4,4'-diamino-3,3'-dimethyldiphenylmethane	838-88-0	ND	ND	ND	0.002	Not Detected
2-Naphthylamine	91-59-8	ND	ND	ND	0.002	Not Detected
3,3'-Dichlorobenzidine	91-94-1	ND	ND	ND	0.002	Not Detected
4-Aminobiphenyl	92-67-1	ND	ND	ND	0.002	Not Detected
2-methylaniline	95-53-4	ND	ND	ND	0.002	Not Detected
4-chloro-o-Toluidine	95-69-2	ND	ND	ND	0.002	Not Detected
2,4-Toluylendiamine	95-80-7	ND	ND	ND	0.002	Not Detected
2,4-Aminoazotoluene	97-56-3	ND	ND	ND	0.002	Not Detected
2-Amino-4-nitrotoluene	99-55-8	ND	ND	ND	0.002	Not Detected
2,4-Xylidin	95-68-1	ND	ND	ND	0.002	Not Detected
2,6-Xylidin	87-62-7	ND	ND	ND	0.002	Not Detected
1, 3 - phenylene diamine	108-45-2	ND	ND	ND	0.002	Not Detected

Test Items	CAS No.	Result(mg/kg)			LOQ (mg/kg)	Limit (mg/kg)
		No.6				
		1st Migration	2nd Migration	3rd Migration		
2-methoxyaniline	90-04-0	ND	ND	ND	0.002	Not Detected
4,4'-Diaminobiphenyl	92-87-5	ND	ND	ND	0.002	Not Detected
4,4'-Methylen-bis-(2-chloroaniline)	101-14-4	ND	ND	ND	0.002	Not Detected
4,4'-Diaminodiphenylmethane	101-77-9	ND	ND	ND	0.002	Not Detected
4,4'-Oxydianiline	101-80-4	ND	ND	ND	0.002	Not Detected
4-chloroaniline	106-47-8	ND	ND	ND	0.002	Not Detected
3,3'-Dimethoxybenzidine	119-90-4	ND	ND	ND	0.002	Not Detected
3,3'-Dimethylbenzidine	119-93-7	ND	ND	ND	0.002	Not Detected
2-Methoxy-5-methylaniline	120-71-8	ND	ND	ND	0.002	Not Detected
2,4,5 – Trimethylaniline	137-17-7	ND	ND	ND	0.002	Not Detected
4,4'-Thiodianiline	139-65-1	ND	ND	ND	0.002	Not Detected
4-aminoazobenzene	60-09-3	ND	ND	ND	0.002	Not Detected
2,4-diaminoanisol	615-05-4	ND	ND	ND	0.002	Not Detected
4,4'-diamino-3,3'-dimethyldiphenylmethane	838-88-0	ND	ND	ND	0.002	Not Detected
2-Naphthylamine	91-59-8	ND	ND	ND	0.002	Not Detected
3,3'-Dichlorobenzidine	91-94-1	ND	ND	ND	0.002	Not Detected
4-Aminobiphenyl	92-67-1	ND	ND	ND	0.002	Not Detected
2-methylaniline	95-53-4	ND	ND	ND	0.002	Not Detected
4-chloro-o-Toluidine	95-69-2	ND	ND	ND	0.002	Not Detected
2,4-Toluylendiamine	95-80-7	ND	ND	ND	0.002	Not Detected
2,4-Aminoazotoluene	97-56-3	ND	ND	ND	0.002	Not Detected
2-Amino-4-nitrotoluene	99-55-8	ND	ND	ND	0.002	Not Detected
2,4-Xylidin	95-68-1	ND	ND	ND	0.002	Not Detected
2,6-Xylidin	87-62-7	ND	ND	ND	0.002	Not Detected
1, 3 - phenylene diamine	108-45-2	ND	ND	ND	0.002	Not Detected

Note:

1. Test Method: With reference to EN 13130-1:2004, analysis was performed by LC-MS-MS.
2. Test Condition and simulant: 3% acetic acid at 100°C for 1 hour.
3. “mg/kg” = milligram per kilogram of foodstuff in contact with
4. LOQ = Limit of quantitation
5. ND = Not Detected or lower than limit of quantitation
6. The specification was quoted from (EU) No 10/2011 and its amendments (EU) 2020/1245.
7. The testing item marked with ‘*’ does not been accredited by CNAS.

7. Peroxide Value Test*

Test Item	Result		Limit
	No.4	No.5	
Peroxide Value	Absent	Absent	Absent

Note:

1. Test method: With reference to 58th Communication on the testing of plastics, Bundesgesundheitsblatt 40 (1997) 412.
2. The specification was quoted from BfR recommendation III.
3. The testing item marked with ‘*’ does not been accredited by CNAS.

Test Item	Result	Limit
	No.6	
Peroxide Value	Absent	Absent

Note:

1. Test method: With reference to European Pharmacopeia (2005) ANNEX X F, Clause 2.5.5, method A.
2. The specification was quoted from BfR recommendation XVII.
3. The testing item marked with ‘*’ does not been accredited by CNAS.

Test Item	Result	Limit
	No.7	
Peroxide Value	Absent	Absent

Note:

1. Test method: With reference to 58th Communication on the testing of plastics, Bundesgesundheitsblatt 40 (1997) 412
2. The specification was quoted from BfR recommendation XV.
3. The testing item marked with ‘*’ does not been accredited by CNAS.

8. Specific Metal Content Test (Chromium, Vanadium, Zirconium, Hafnium)*

Test Items	Result (mg/kg)		LOQ (mg/kg)	Limit (mg/kg)
	No.4	No.5		
Chromium (Cr)	ND	ND	5	10
Vanadium (V)	ND	ND	5	20
Zirconium (Zr)	ND	ND	5	100
Hafnium (Hf)	ND	ND	5	100

Note:

1. Test method: Acid digestion, analysis was performed by ICP-MS.
2. “mg/kg” = milligram per kilogram
3. LOQ = Limit of quantitation
4. ND = Not Detected or lower than limit of quantitation
5. The specification was quoted from BfR recommendation III.
6. The testing item marked with ‘*’ does not been accredited by CNAS.

9. Polynuclear aromatic hydrocarbons(PAHs)

Test Item(s)	LOQ (mg/kg)	Limit (mg/kg)	Results (mg/kg)			
			No.4	No.5	No.6	No.7
Naphthalene (Nap)	0.2	1	ND	ND	ND	ND
Phenanthrene (PA)*	0.2	<1 Sum	ND	ND	ND	ND
Anthracene (Ant)*	0.2		ND	ND	ND	ND
Fluoranthene (FLT)*	0.2		ND	ND	ND	ND
Pyrene (Pyr)*	0.2		ND	ND	ND	ND
Benzo[a] anthracene (BaA)	0.2	0.2	ND	ND	ND	ND
Chrysene (CHR)	0.2	0.2	ND	ND	ND	ND
Benzo[b]fluoranthene (BbF)	0.2	0.2	ND	ND	ND	ND
Benzo[k]fluoranthene (BkF)	0.2	0.2	ND	ND	ND	ND
Benzo[a]pyrene (BaP)	0.2	0.2	ND	ND	ND	ND
Indeno[1,2,3-cd]pyrene (IND)	0.2	0.2	ND	ND	ND	ND
Dibenzo[a,h]anthracene (DBA)	0.2	0.2	ND	ND	ND	ND
Benzo[g,h,i]perylene (BghiP)	0.2	0.2	ND	ND	ND	ND
Benzo[j]fluoranthene	0.2	0.2	ND	ND	ND	ND
Benzo[e]Pyrene	0.2	0.2	ND	ND	ND	ND
Sum of 4 marked PAHs*	--	1	ND	ND	ND	ND
Sum of 15 listed PAHs	--	1	ND	ND	ND	ND

Note:
1. Test method: With reference to AFPS GS 2019:01 PAK, analysis was performed by GC-MS.
2. “mg/kg” = milligram per kilogram
3. LOQ = Limit of quantitation
4. ND = Not Detected or lower than limit of quantitation

10. Visible Color Migration*

Food Simulant	Result				Limit
	No.4	No.5	No.6	No.7	
20% ethanol	Negative	Negative	Negative	Negative	Negative

Note:
1. The specification was quoted from BfR recommendation IX.
2. Negative = No color release observed, Positive = Color release observed
3. The testing item marked with ‘*’ does not been accredited by CNAS.

11. Specific Metal Content test (Lead, Zinc, Manganese, Lithium, Cobalt, Titanium, Antimony)*

Test Items	Result (mg/kg)	LOQ (mg/kg)	Limit (mg/kg)
	No.6		
Lead (Pb)	ND	5	40
Zinc (Zn)	7	5	80
Manganese (Mn)	7	5	140
Lithium (Li)	ND	5	130
Cobalt (Co)	ND	5	125
Titanium (Ti)	ND	5	120
Antimony (Sb)	ND	5	350

Note:
1. Test method: Acid digestion, analysis was performed by ICP-MS.
2. “mg/kg” = milligram per kilogram
3. LOQ = Limit of quantitation
4. ND = Not Detected or lower than limit of quantitation
5. The specification was quoted from BfR recommendation XVII.
6. The testing item marked with ‘*’ does not been accredited by CNAS.

12. Specific Migration of Antimony

Test Items	Result (mg/kg)			LOQ (mg/kg)	Limit (mg/kg)
	No.6				
	1st Migration	2nd Migration	3rd Migration		
Antimony (Sb)	ND	ND	ND	0.01	3rd Migration:0.04, 3rd<2nd<1st

Note:

1. Test Method: With reference to EN 13130-1: 2004, sample preparation in 3% acetic acid at 100°C for 1 hour, analysis was performed by ICP-MS.
2. “mg/kg” = milligram per kilogram of foodstuff in contact with
3. LOQ = Limit of quantitation
4. ND = Not Detected or lower than limit of quantitation
5. The specification was quoted from (EU) No 10/2011.

13. Extractable Components Test

Food Simulant	Test Condition	Result (%)	LOQ (%)	Limit (%)
		No.7		
Distilled Water	Reflux for 5 hours	ND	0.1	0.5
3% Acetic Acid	Reflux for 5 hours	ND	0.1	0.5
10% Ethanol	Reflux for 5 hours	ND	0.1	0.5

Note:

1. Test Method: With reference to 61st Communication on testing of plastics in Bundesge sundheitsbl 46 (2003) 362.
2. “%” = percentage by weight
3. LOQ = Limit of quantitation
4. ND = Not Detected or lower than limit of quantitation
5. The specification was quoted from BfR recommendation XV.

14. Volatile Organic Compounds*

Test Item	Test Condition	Result (%)	LOQ (%)	Limit (%)
		No.7		
Volatile Organic compounds	200°C for 4 hours	0.26	0.05	0.5

Note:

1. Test method: With reference to Bestimmung von flüchtigen Verbindungen in Bedarfsgegenständen aus Silikon.
2. “%” = percentage by weight
3. LOQ = Limit of quantitation
4. ND = Not Detected or lower than limit of quantitation
5. The specification was quoted from BfR recommendation XV.
6. The testing item marked with ‘*’ does not been accredited by CNAS.

15. Organotin Compounds Content Test

Test Items	Result (mg/kg)	LOQ (mg/kg)	Limit (mg/kg)
	No.7		
Monobutyltin (MBT)	Absent	0.05	Absent
Dibutyltin (DBT)	Absent	0.05	Absent
Tributyltin (TBT)	Absent	0.05	Absent
Tetrabutyltin (TeBT)	Absent	0.05	Absent
Monooctyltin (MOT)	Absent	0.05	Absent
Diotyltin (DOT)	Absent	0.05	Absent
Triphenyltin (TPhT)	Absent	0.05	Absent

Note:

1. Test method: With reference to DIN EN ISO 17353: 2005, analysis was performed by GC-MS.
2. “mg/kg” = milligram per kilogram
3. LOQ = Limit of quantitation

16. Platinum(Pt) content*

Test Item	Result (mg/kg)	LOQ (mg/kg)	Limit (mg/kg)
	No.7		
Platinum(Pt)	ND	20	50

Note:

1. Test method: Acid digestion, analysis was performed by ICP-MS.
2. “mg/kg” = milligram per kilogram
3. ND = Not Detected or lower than limit of quantitation
4. The specification was quoted from BfR recommendation XV.
5. The testing item marked with ‘*’ does not been accredited by CNAS.

17. Sensorial Examination

Test Items	Result	Maximum permissible limit
	The submitted sample	
Sensorial examination odour	0	2.5
Sensorial examination taste	0	2.5

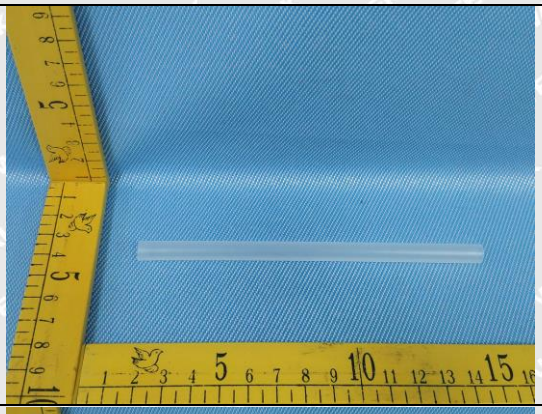
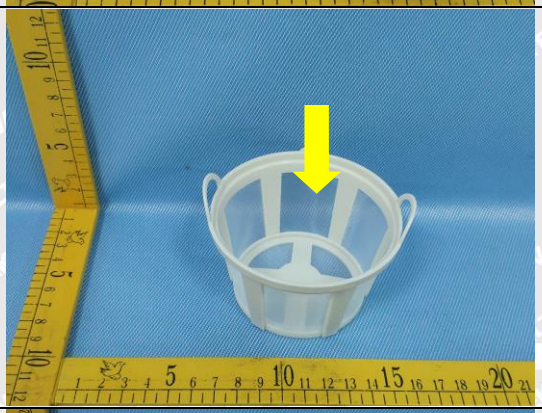
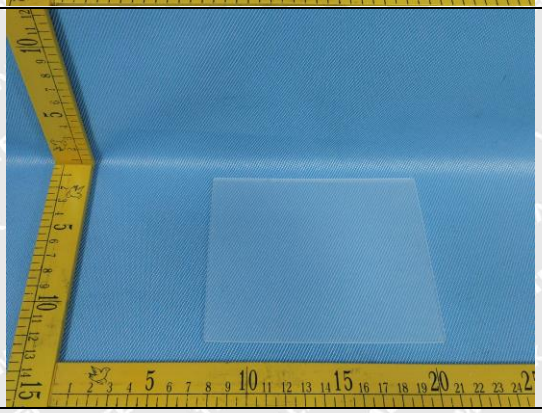
Note:

1. Test method: With reference to DIN 10955: 2004.
2. Scale:
   0 = no discernible deviation
   1 = barely discernible deviation
   2 = weak deviation
   3 = clear deviation
   4 = strong deviation

Sample Photo：

Photograph of parts tested:

No.	Photo of testing part	Parts Description	Client Claimed Material
1		Transparent glass	Glass
2		Silvery metal	Stainless steel
3		Silvery metal	Aluminium
4		White plastic	PP

No.	Photo of testing part	Parts Description	Client Claimed Material
5		Transparent plastic	PP
6		White plastic	PET
7		Translucent silicone rubber	Silicone rubber

Remarks:
1. The results shown in this test report refer only to the sample(s) tested;
2. This test report cannot be reproduced, except in full, without prior written permission of the company;
3. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver;
4. The Applicant name and Address, the sample(s) and sample information was/were provided by the applicant who should be responsible for the authenticity which Waltek hasn't verified;
5. If the report is not stamped with the accreditation recognized seal, it will only be used for scientific research, education, and internal quality control activities, and is not used for the purpose of issuing supporting data to the society.

====== End of Report ======