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Test Report Report No.: 200714088GZU-001 Date: Sep 10, 2020

Applicant: Hamilton Beach Brands, Inc.

4421 Waterfront Drive Glen Allen, Virginia 23060, US

Sample Description:
The following submitted sample(s) said to be:

Item Name	:	**Commercial Blender**
Model No.	:	Type GB38
Reference No.	:	HBB2XX*-YYY (where X equals any number from 0-9 to indicate color or attachment differences, * equals any 1 or 2 letters A-Z to designate customer or may not be included, YYY may be any 2 or 3 characters to designate country)
Date of Sample Received	:	Jul 15, 2020 & Aug 22, 2020
Testing Period	:	Jul 15, 2020 to Sep 1, 2020

Tests conducted:
As requested by the applicant, refer to following page(s) for details.
Conclusion:

According to the test results of below test parameters, the submitted sample complied with the food contacting requirements for §30 and §31 LFGB and Regulation (EC) 1935/2004.

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Prepared by:

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Test Report Report No.: 200714088GZU-001 Date: Sep 10, 2020

Conclusion:

Based on the assessment of the submitted sample and the information provided, the following tests had been conducted:

Tested parameters		Result
1)	Sensory test	Pass
2)	Global migration on plastic	Pass
3)	Specific migration of heavy metal on plastic	Pass
4)	PAH content and Specific migration of PAH	Pass
5)	Total Lead and Cadmium	Pass
6)	Volatile organic matter	Pass
7)	Peroxides residues	Pass
8)	Extractable substances of silicone rubber	Pass
9)	Organotin compounds content	Pass
10)	Determination of heavy metal release on metal	Pass
11)	Specific migration of primary aromatic amines	Pass
12)	Specific migration of formaldehyde	Pass
13)	Specific migration of acrylonitrile	Pass
14)	Specific migration of Hexamethylenediamine	Pass
15)	Specific Migration of Bisphenol A	Pass
16)	1,3- butadiene content	Pass
17)	Specific Migration of butadiene	Pass
18)	Nitrosamines	Pass
19)	Total Lead, Cadmium and Zinc Content	Pass
20)	Specific Migration of Terephthalic Acid	Pass
21)	Specific Migration of 2,2,4,4-Tetramethyl-1,3-cyclobutanediol	Pass

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Tests Conducted:

Tested components:

(1) Black PA66+30GF plastic (Cutter Housing)
Base Material: PA66+30GF
Base Materia Grade: TECHNYL A 216 V30
Base Materia Material Manufacturer: Rhodia Polyamide (Shanghai) Co., Ltd.
Base Materia Color: black
Additive Grade: PE2813
Additive Material Manufacturer: Cabot Corporation

(2) Black ABS plastic (Jar Lid)
Base Material: ABS
Base Materia Grade: PA-707
Base Materia Material Manufacturer: CHI MEI CORPORATION
Base Materia Color: black
Additive Grade: 40556
Additive Material Manufacturer: Qiao Hong Plastic Co., Ltd

(3) Black silicone rubber (Lid seal, Cutting gasket)
Base Material: Silicon rubber
Base Materia Grade: TY651
Base Materia Material Manufacturer: WYNCA Tinyo Silicon Co., Ltd.
Base Materia Color: black
Additive Grade: XH-1801
Additive Material Manufacturer: Dong Guan Xin He Silicone Technologies Material Co., Ltd.

(4) Natural color silicone rubber (Cutting gasket)
Base Material: Silicon rubber
Base Materia Grade: TY651
Base Materia Material Manufacturer: WYNCA Tinyo Silicon Co., Ltd.
Base Materia Color: natural

(5) Black rubber (Oil Seal)
Base Material: fluorine rubber
Base Materia Grade: FKM, F7003
Base Materia Material Manufacturer: SOLVAY(Shanghai) Co., Ltd
Base Materia Color: black
Additive Grade: N990
Additive Material Manufacturer: Canada Cancarb Limited

(6) Silver color metal (Jar)
Base Material: Stainless steel
Base Materia Grade: SUS304
Base Materia Material Manufacturer: Shen Zhen Yong Hui Fa Hardware Products Co., Ltd
Base Materia Color: natural

(7) Silver color metal (Nut)
Base Material: Stainless steel
Base Materia Grade: 304
Base Materia Material Manufacturer: Hui Zhou Yong Xin Long Industrial Co., Ltd.
Base Materia Color: natural

(8) Silver color metal (Washer)

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Base Material: Stainless steel
Base Materia Grade: SUS304
Base Materia Material Manufacturer: Hui Zhou Yong Xin Long Industrial Co., Ltd.
Base Materia Color: natural

(9) Silver color metal (Blade)
Base Material: Stainless steel
Base Materia Grade: SUS301
Base Materia Material Manufacturer: Dong Guan Zhao Cheng (Meng Ji) Hardware Products Co., Ltd
Base Materia Color: natural

(10)Transparent PC plastic (Jar, Fill cap)
Base Material: PC
Base Materia Grade: IR2200
Base Materia Material Manufacturer: FORMOSA CHEMICAL & FIBER CO., MAI LIAO ZONE
Base Materia Color: natural

(11)Silver color metal (Washer)
Base Material: Stainless steel
Base Materia Grade: SUS304
Base Materia Material Manufacturer: Dong Guan Zhao Cheng (Meng Ji) Hardware Products Co., Ltd
Base Materia Color: natural

(12)Transparent PC plastic (Jar, Fill cap)
Base Material: PC
Base Materia Grade: L-1225Y
Base Materia Material Manufacturer: Teijin Chemicals Ltd.
Base Materia Color: natural

(13)Transparent PCTG plastic (Jar, Fill cap)
Base Material: PCT-G
Base Materia Grade: Tritan TX2001
Base Materia Material Manufacturer: EASTMAN CHEMICAL COMPANY
Base Materia Color: natural

(14)Silver color metal (Shaft)
Base Material: Stainless steel
Base Materia Grade: SUS303
Base Materia Material Manufacturer: Dong Guan Zhao Cheng (Meng Ji) Hardware Products Co., Ltd
Base Materia Color: natural

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1 Sensory Evaluation

With reference to §64 LFGB L00.90-6.

Sample was cleaned according to the product's instruction manual or in the absence of such manual with distilled water. Food simulant was filled in the sample under below mentioned time and temperature. Odour and taste was evaluated with 6 panelists using control sample of food simulant.

I. Test condition:

Food Simulant	Test Temperature	Test Duration
Distilled water	100 °C	0.5 hours

II. Result:

Test Item	Result (1), (2), (5), (7) to (14)	Limit
Appearance of simulant	Clear and colourless	Clear and colourless
Odour of simulant	1	< 3.0 (No significant deterioration)
Taste of simulant	1	< 3.0 (No significant deterioration)

Test Item	Result (3)$^{\sigma}$, (4)$^{\sigma}$, (6)$^{\sigma}$	Limit
Appearance of simulant	Clear and colourless	Clear and colourless
Odour of simulant	1	< 3.0 (No significant deterioration)
Taste of simulant	1	< 3.0 (No significant deterioration)

Evaluation Scale: 0= no aberration, neutral
1= very slight deterioration, barely perceivable
2= slight deterioration
3= significant deterioration
4= strong deterioration

σ = Means retest result

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2 Overall Migration Test

As per Commission Regulation (EU) No. 10/2011 and its amendments (EU) No. 2016/1416 & (EU) 2017/752 & (EU) 2019/37.

I. Test condition:

Aqueous food simulant:	
Test no.	Time and temperature
OM4	1 hour at 100 °C

Fatty food simulant:	
Test no.	Time and temperature
OM4	1 hour at 100 °C

Tested component	Food simulant	Time(hour)	Temperature(°C)
(1), (2), (10), (12), (13)	10% (v/v) Ethanol	1	100
	3% (w/v) Acetic acid	1	100
	95%(v/v) Ethanol	3	60
	Iso –octane	1	60

II. Test Results:

Food Simulant	Result(mg/dm²)					Detection Limit (mg/dm²)	Limit (mg/dm²)
	(1)	(2)	(10)	(12)	(13)		
10% (v/v) Ethanol	ND	ND	ND	ND	ND	1	10
3% (w/v) Acetic acid	ND	ND	ND	ND	ND	1	10
95%(v/v) Ethanol	ND	ND	ND	ND	ND	1	10
Iso –octane	ND	ND	ND	ND	ND	1	10

ND = Not detected

Ratio of food contact surface area to volume of component (1), (2), (10), (12), (13) used to establish the compliance of material or article =1.0 dm²: 100 mL.

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3 Specific Migration of Heavy Metal

As per Commission Regulation (EU) No. 10/2011 and its amendments and (EU) No. 2016/1416, (EU) No. 2017/752 and (EU) No. 2018/79.

I. Test condition:

Temperature: 100 °C Time: 0.5 hours

II. Test result:

Food simulant	Element	Result (mg/kg)					Detection limit (mg/kg)	Limit (mg/kg)
		(1)	(2)	(10)	(12)	(13)		
3% (w/v) Acetic acid in aqueous solution	Barium	ND	ND	ND	ND	ND	0.1	1 (max.)
	Cobalt	ND	ND	ND	ND	ND	0.03	0.05 (max.)
	Copper	ND	ND	ND	ND	ND	1	5 (max.)
	Iron	ND	ND	ND	ND	ND	5	48 (max.)
	Lithium	ND	ND	ND	ND	ND	0.1	0.6 (max.)
	Manganese	ND	ND	ND	ND	ND	0.1	0.6 (max.)
	Zinc	ND	ND	ND	ND	ND	1	5 (max.)
	Aluminium	ND	ND	ND	ND	ND	0.1	1(max)
	Nickel	ND	ND	ND	ND	ND	0.01	0.02(max)
	Tungsten	ND	ND	ND	ND	ND	0.01	0.05 (max.)

ND = Not detected

4 Total Lead and Cadmium Content

By microwave digestion and followed by Inductively Coupled Plasma (ICP) Spectrophotometric analysis.

Element	Result (mg/kg)							Detection Limit (mg/kg)	Requirement (mg/kg)
	(1)	(2)	(3) σ	(4) σ	(10)	(12)	(13)		
Lead (Pb)	ND	ND	ND	ND	ND	ND	ND	10	100
Cadmium (Cd)	ND	ND	ND	ND	ND	ND	ND	10	100

ND = Not detected
σ = Means retest result

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5 Polycyclic Aromatic Hydrocarbons (PAHs) Content

By solvent extraction and determined by Gas Chromatographic - Mass Spectrometric Detector (GC-MSD).

Test Results:

Compound	Result (mg/kg)								Detection Limit (mg/kg)
	(1)	(2)	(3) σ	(4) σ	(5)	(10)	(12)	(13)	
Naphthalene	ND	ND	ND	ND	ND	ND	ND	ND	0.2
Acenaphthylene	ND	ND	ND	ND	ND	ND	ND	ND	0.2
Acenaphthene	ND	ND	ND	ND	ND	ND	ND	ND	0.2
Fluorene	ND	ND	ND	ND	ND	ND	ND	ND	0.2
Phenanthrene	ND	ND	ND	ND	ND	ND	ND	ND	0.2
Anthracene	ND	ND	ND	ND	ND	ND	ND	ND	0.2
Fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	0.2
Pyrene	ND	ND	ND	ND	ND	ND	ND	ND	0.2
Chrysene	ND	ND	ND	ND	ND	ND	ND	ND	0.2
Benzo[a]anthracene	ND	ND	ND	ND	ND	ND	ND	ND	0.2
Benzo[b]fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	0.2
Benzo[j]fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	0.2
Benzo[k]fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	0.2
Benzo[a]pyrene	ND	ND	ND	ND	ND	ND	ND	ND	0.2
Benzo[e]pyrene	ND	ND	ND	ND	ND	ND	ND	ND	0.2
Dibenzo[a,h]anthrancene	ND	ND	ND	ND	ND	ND	ND	ND	0.2
Indeno[c,d]pyrene	ND	ND	ND	ND	ND	ND	ND	ND	0.2
Benzo[g,h,i]perylene	ND	ND	ND	ND	1.3	ND	ND	ND	0.2
Sum of PAHs	ND	ND	ND	ND	1.3	ND	ND	ND	--

ND=No detected

σ = Means retest result

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6 Migration of Polycyclic Aromatic Hydrocarbons (PAHs)

With reference to Commission Regulation (EU) No. 10/2011 and its amendment.

I. Test condition:

Food Simulant	Temperature(°C)	Time (hours)
3% (w/v) acetic acid	100	0.5
10% (v/v) ethanol	100	0.5
Iso –octane	60	0.6

II. Test Results:

Compound	Result (mg/kg) (5)	Detection limit (mg/kg)	Requirement mg/kg)
Naphthalene	ND	0.01	---
Acenaphthylene	ND	0.01	---
Acenaphthene	ND	0.01	---
Fluorene	ND	0.01	---
Phenanthrene	ND	0.01	---
Anthracene	ND	0.01	---
Fluoranthene	ND	0.01	---
Pyrene	ND	0.01	---
Chrysene	ND	0.01	---
Benzo[a]anthracene	ND	0.01	---
Benzo[b]fluoranthene	ND	0.01	---
Benzo[j]fluoranthene	ND	0.01	---
Benzo[k]fluoranthene	ND	0.01	---
Benzo[a]pyrene	ND	0.01	ND
Benzo[e]pyrene	ND	0.01	---
Dibenzo[a,h]anthrancene	ND	0.01	---
Indeno[c,d]pyrene	ND	0.01	---
Benzo[g,h,i]perylene	ND	0.01	---
Sum of PAHs	ND	0.01	ND

ND = Not detected

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7 Specific Migration of Primary Aromatic Amines

As per Commission Regulation (EU) No. 10/2011 and JRC Technical Guidelines EUR 24815 EN 2011.

I. Test condition:

Tested component	Food simulant	Time(hour)	Temperature (°C)
(1), (2), (5)	3% (w/v) Acetic acid	0.5	100

II. Test result:

Food simulant	Result(mg/kg)			Detection Limit (mg/kg)	Limit (mg/kg)
	(1)	(2)	(5)		
3% (w/v) Acetic acid	ND	ND	ND	0.01	ND

ND = Not detected

Ratio of food contact surface area to volume of component (1), (2), (5) used to establish the compliance of material or article = 0.6 dm^2: 100 mL.

8 Specific Migration of Hexamethylenediamine Test

As per Commission Regulation (EU) No. 10/2011 and its amendments, and BS EN 13130-21:2005.

I. Test condition:

Tested component	Food simulant	Time(hour)	Temperature(°C)
(1)	10% (v/v) Ethanol	0.5	100
	3% (w/v) Acetic acid	0.5	100
	Fatty food simulant	0.5	100

II. Test result

Food simulant	Result(mg/kg)	Detection Limit (mg/kg)	Limit (mg/kg)
	(1)		
10% (v/v) Ethanol	ND	0.5	2.4
3% (w/v) Acetic acid	ND	0.5	2.4
Fatty food simulant	ND	0.5	2.4

ND = Not detected

9 1,3-Butadiene Content

As per Commission Regulation (EU) No.10/2011 and BS EN 13130-4:2004.

Tested Component	Result (mg/kg)	Detection Limit (mg/kg)	Limit (mg/kg)
(2)	0.5	0.1	1

ND = Not detected

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10 Specific Migration of Acrylonitrile Test for Plastic Food Contacting Materials/Articles

As per Commission Regulation (EU) No. 10/2011 and BS EN 13130-3:2004.

I. Test condition:

Tested component	Food simulant	Time (hour)	Temperature(°C)
(2)	10% (v/v) Ethanol	0.5	100
	3% (w/v) Acetic acid	0.5	100
	Fatty food simulant	0.5	100

II. Test result

Food simulant	Result(mg/kg) (2)	Detection Limit (mg/kg)	Limit (mg/kg)
10% (v/v) Ethanol	ND	0.01	ND
3% (w/v) Acetic acid	ND	0.01	ND
Fatty food simulant	ND	0.01	ND

ND = Not detected

11 Specific Migration of Butadiene Test for Plastic Food Contacting Materials/Articles

As per Commission Regulation (EU) No. 10/2011 and DD CEN/TS 13130-15:2005.

I. Test condition:

Tested component	Food simulant	Time (hour)	Temperature(°C)
(2)	10% (v/v) Ethanol	0.5	100
	3% (w/v) Acetic acid	0.5	100
	Fatty food simulant	0.5	100

II. Test result

Food Simulant	Result(mg/kg) (2)	Detection Limit (mg/kg)	Limit (mg/kg)
10% (v/v) Ethanol	ND	0.01	ND
3% (w/v) Acetic acid	ND	0.01	ND
Fatty food simulant	ND	0.01	ND

ND = Not detected

12 Volatile Organic Matter of Styrene Copolymers

As per LFGB Recommendation VI.

Tested Component	Result (mg/dm^2)	Detection Limit(mg/dm^2)	Limit(mg/dm^2)
(2)	11	5	15

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13 Peroxide Residues of Styrene Copolymers

As per LFGB Recommendation V/VI.

Tested Component / Sample	Result
(2)	No positive reaction

Limit: no positive reaction to peroxides

14 Specific Migration of Bisphenol A Test for Plastic Food Contacting Materials/Articles

As per Commission Regulation (EU) 2018/213 and DD CEN/TS 13130-13:2005.

I. Test condition:

Food simulant	Time(hour)	Temperature(°C)
10% (v/v) Ethanol	0.5	100
3% (w/v) Acetic acid	0.5	100
Fatty food simulant	0.5	100

II. Test result:

Food Simulant	Result(mg/kg)		Detection Limit (mg/kg)	Limit (mg/kg)
	(10)	(12)		
3% (w/v) Acetic acid	ND	ND	0.01	0.05
10% (v/v) Ethanol	ND	ND	0.01	0.05
Fatty food simulant	ND	ND	0.01	0.05

ND = Not detected

15 Specific Migration of Terephthalic Acid Test for Plastic Food Contacting Materials/Articles

As per Commission Regulation (EU) No. 10/2011 and BS EN 13130-2:2004.

I. Test condition:

Tested component	Food simulant	Time(hour)	Temperature(°C)
(13)	10% (v/v) Ethanol	0.5	100
	3% (w/v) Acetic acid	0.5	100
	Fatty food simulant	0.5	100

II. Test result:

Food Simulant	Result(mg/kg)	Detection Limit (mg/kg)	Limit (mg/kg)
	(13)		
10% (v/v) Ethanol	ND	1.0	7.5
3% (w/v) Acetic acid	ND	1.0	7.5
Fatty food simulant	ND	1.0	7.5

ND = Not detected

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16 Specific Migration of 2,2,4,4-Tetramethyl-1,3-cyclobutanediol Test

As per Commission Regulation (EU) No. 10/2011 and its amendments.

I. Test condition:

Tested component	Food simulant	Time(hour)	Temperature(°C)
(13)	10% (v/v) Ethanol	0.5	100
	3% (w/v) Acetic acid	0.5	100
	Fatty food simulant	0.5	100

II. Test result:

Food Simulant	Result(mg/kg)	Detection Limit (mg/kg)	Limit (mg/kg)
	(13)		
10% (v/v) Ethanol	ND	1.0	5
3% (w/v) Acetic acid	ND	1.0	5
Fatty food simulant	ND	1.0	5

ND = Not detected

17 Volatile Organic Matter of Silicone Rubber

As per BfR recommendations on food contact materials (formerly "Plastics Recommendations") part BII XV.

I. Test condition:

Temperature: 200 °C Time: 4 hours

II. Result:

Tested component of submitted sample	Result (%)	Detection Limit (%)	Limit (%)
(3) σ	0.4	0.1	0.5
(4) σ	0.4	0.1	0.5

σ = Means retest result

18 Extractable substances of Silicone Rubber

As per LFGB plastic recommendation XV.

Food simulant	Result (%)		Detection Limit (%)	Limit (%)
	(3) σ	(4) σ		
Distilled water	ND	ND	0.10	0.5
3% (w/v) acetic acid	0.15	ND	0.10	0.5
10% (v/v) ethanol	ND	ND	0.10	0.5

ND=No Detected
σ = Means retest result

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19 Peroxide Residues of Silicone Rubber

As per LFGB Plastic Recommendation BII XV.

Tested Component	Result
(3)σ	No positive reaction
(4)σ	No positive reaction

Limit: No positive reaction to peroxides
σ = Means retest result

20 Organotin Compounds Content

With reference to ISO 17353:2004, by Ethanol Extraction, derivatization and followed by Gas Chromatography Mass Spectrometric (GC/MS) analysis.

Compound	Result (mg/kg)		Detection limit (mg/kg)
	(3)σ	(4)σ	
Dimethyl Tin (DMT)	ND	ND	0.025
Monobutyl Tin (MBT)	ND	ND	0.025
Monooctyl Tin (MOT)	ND	ND	0.025
Dibutyl Tin (DBT)	ND	ND	0.025
Dioctyl Tin (DOT)	ND	ND	0.025
Tributyl Tin (TBT)	ND	ND	0.025
Tetrabutyl Tin (TeBT)	ND	ND	0.025
Tri-octyl Tin (TriOT)	ND	ND	0.025
Monomethyl Tin (MeT)	ND	ND	0.025
Triphenyltin (TPT)	ND	ND	0.025
Tricyclohexyltin (TCHT)	ND	ND	0.025
Didodecyltin	ND	ND	0.025

ND = Not detected
σ = Means retest result

21 Total Lead, Cadmium and Zinc Content

By acid digestion and followed by inductively coupled plasma (ICP) spectrophotometric analysis.

Element	Result (%(W/W))	Detection Limit (%(W/W))	Requirement (%(W/W))
	(5)		
Lead (Pb)	ND	0.001	0.003 / 0.001
Cadmium (Cd)	ND	0.001	0.01
Zinc (Zn)	ND	0.1	3 / 1

ND=No detected

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22 Nitrosamines and Nitrosatable Substances on Natural and Synthetic Rubber

As per EN 12868.

Compound	Result (µg/kg) (5)	Detection Limit (µg/kg)	Requirement (µg/kg)
N-Nitrosamines released	ND	5	10 (max)
N-Nitrosatable substances	ND	50	100 (max)

µg/kg=microgram per kilogram
ND=No detected
The analytical result were adjusted by subtracting analytical correction factor.

23 Specific Migration of Formaldehyde on Natural and Synthetic Rubber

With reference to §64 LFGB B80.30-1, B80.30-2 and B80.30-3.

I. Test condition:

Tested component	Food simulant	Temperature (°C)	Time (hours)
(5)	3% (w/v) acetic acid	100	0.5

II. Test result:

Tested component	Result (ug/ml)	Detection Limit ((ug/ml)	Limit (ug/ml)
(5)	ND	1	3

ug/ml = microgram per millilitre
ND = Not detected

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24 Release Testing on Metals and Alloys Used in Food Contact Materials and Articles

With reference to EU Technical Guide "Council of Europe Resolution CM/Res(2013)9 on metals and alloys Used in Food Contact Materials and Articles". Migration test was carried out and heavy metal content was determined by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES) and Inductively Coupled Plasma Mass Spectrometer (ICP-MS) with reference to ISO 11885:2007 and ISO 17294-2:2003 respectively.

I. Test Condition:

Temperature: 100 °C Time: 0.5 hours

II. Test Result:

Food simulant: Artificial tap water (prepare according DIN 10531 Clause 4.2.2.2)
Food simulant: Citric acid (5 g/L)

Tested component (6) ᵅ:							
Elements	Result 1st test (mg/kg)	Result 2nd test (mg/kg)	Result 1st test+Result 2nd test (mg/kg)	Result 3rd test (mg/kg)	Detection Limit (mg/kg)	7*Limit (mg/kg)	Limit (mg/kg)
Silver (Ag)	ND	ND	ND	ND	0.05	0.56	0.08
Aluminium (Al)	ND	ND	ND	ND	1	35	5
Chromium (Cr)	0.03	0.04	0.07	ND	0.02	1.75	0.250
Cobalt (Co)	0.02	ND	0.02	ND	0.01	0.14	0.02
Copper (Cu)	ND	ND	ND	ND	0.5	28	4
Iron (Fe)	3	ND	3	ND	1	280	40
Manganese (Mn)	ND	ND	ND	ND	0.1	12.6	1.8
Molybdenum(Mo)	ND	ND	ND	ND	0.02	0.84	0.12
Nickel (Ni)	0.2	0.2	0.4	ND	0.1	0.98	0.14
Tin (Sn)	ND	ND	ND	ND	10	700	100
Vanadium (V)	ND	ND	ND	ND	0.005	0.07	0.01
Zinc (Zn)	ND	ND	ND	ND	1	35	5
Antimony (Sb)	ND	ND	ND	ND	0.01	0.28	0.04
Arsenic (As)	ND	ND	ND	ND	0.001	0.014	0.002
Barium (Ba)	ND	ND	ND	ND	0.1	8.4	1.2
Beryllium (Be)	ND	ND	ND	ND	0.01	0.07	0.01
Cadmium (Cd)	ND	ND	ND	ND	0.001	0.035	0.005
Lead (Pb)	ND	ND	ND	ND	0.005	0.070	0.010
Lithium (Li)	ND	ND	ND	ND	0.010	0.336	0.048
Mercury (Hg)	ND	ND	ND	ND	0.003	0.021	0.003
Thallium (Tl)	ND	ND	ND	ND	0.0001	0.0007	0.0001
Magnesium(Mg)	ND	ND	ND	ND	1	-	-
Titanium(Ti)	ND	ND	ND	ND	1	-	-

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Tested component (7):							
Elements	Result 1st test (mg/kg)	Result 2nd test (mg/kg)	Result 1st test+Result 2nd test (mg/kg)	Result 3rd test (mg/kg)	Detection Limit (mg/kg)	7*Limit (mg/kg)	Limit (mg/kg)
Silver (Ag)	ND	ND	ND	ND	0.05	0.56	0.08
Aluminium (Al)	ND	ND	ND	ND	1	35	5
Chromium (Cr)	0.07	0.04	0.11	ND	0.02	1.75	0.250
Cobalt (Co)	ND	ND	ND	ND	0.01	0.14	0.02
Copper (Cu)	ND	ND	ND	ND	0.5	28	4
Iron (Fe)	ND	ND	ND	ND	1	280	40
Manganese (Mn)	ND	ND	ND	ND	0.1	12.6	1.8
Molybdenum(Mo)	ND	ND	ND	ND	0.02	0.84	0.12
Nickel (Ni)	ND	ND	ND	ND	0.1	0.98	0.14
Tin (Sn)	ND	ND	ND	ND	10	700	100
Vanadium (V)	ND	ND	ND	ND	0.005	0.07	0.01
Zinc (Zn)	ND	ND	ND	ND	1	35	5
Antimony (Sb)	ND	ND	ND	ND	0.01	0.28	0.04
Arsenic (As)	ND	ND	ND	ND	0.001	0.014	0.002
Barium (Ba)	ND	ND	ND	ND	0.1	8.4	1.2
Beryllium (Be)	ND	ND	ND	ND	0.01	0.07	0.01
Cadmium (Cd)	ND	ND	ND	ND	0.001	0.035	0.005
Lead (Pb)	ND	ND	ND	ND	0.005	0.070	0.010
Lithium (Li)	ND	ND	ND	ND	0.010	0.336	0.048
Mercury (Hg)	ND	ND	ND	ND	0.003	0.021	0.003
Thallium (Tl)	ND	ND	ND	ND	0.0001	0.0007	0.0001
Magnesium(Mg)	ND	ND	ND	ND	1	-	-
Titanium(Ti)	ND	ND	ND	ND	1	-	-

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Test Report Report No.: 200714088GZU-001 Date: Sep 10, 2020

Tested component (8):							
Elements	Result 1st test (mg/kg)	Result 2nd test (mg/kg)	Result 1st test+Result 2nd test (mg/kg)	Result 3rd test (mg/kg)	Detection Limit (mg/kg)	7*Limit (mg/kg)	Limit (mg/kg)
Silver (Ag)	ND	ND	ND	ND	0.05	0.56	0.08
Aluminium (Al)	ND	ND	ND	ND	1	35	5
Chromium (Cr)	0.21	0.05	0.26	ND	0.02	1.75	0.250
Cobalt (Co)	ND	ND	ND	ND	0.01	0.14	0.02
Copper (Cu)	ND	ND	ND	ND	0.5	28	4
Iron (Fe)	3	ND	3	ND	1	280	40
Manganese (Mn)	ND	ND	ND	ND	0.1	12.6	1.8
Molybdenum(Mo)	ND	ND	ND	ND	0.02	0.84	0.12
Nickel (Ni)	0.1	ND	0.1	ND	0.1	0.98	0.14
Tin (Sn)	ND	ND	ND	ND	10	700	100
Vanadium (V)	ND	ND	ND	ND	0.005	0.07	0.01
Zinc (Zn)	ND	ND	ND	ND	1	35	5
Antimony (Sb)	ND	ND	ND	ND	0.01	0.28	0.04
Arsenic (As)	ND	ND	ND	ND	0.001	0.014	0.002
Barium (Ba)	ND	ND	ND	ND	0.1	8.4	1.2
Beryllium (Be)	ND	ND	ND	ND	0.01	0.07	0.01
Cadmium (Cd)	ND	ND	ND	ND	0.001	0.035	0.005
Lead (Pb)	ND	ND	ND	ND	0.005	0.070	0.010
Lithium (Li)	ND	ND	ND	ND	0.010	0.336	0.048
Mercury (Hg)	ND	ND	ND	ND	0.003	0.021	0.003
Thallium (Tl)	ND	ND	ND	ND	0.0001	0.0007	0.0001
Magnesium(Mg)	ND	ND	ND	ND	1	-	-
Titanium(Ti)	ND	ND	ND	ND	1	-	-

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Test Report Report No.: 200714088GZU-001 Date: Sep 10, 2020

Tested component (9):							
Elements	Result 1st test (mg/kg)	Result 2nd test (mg/kg)	Result 1st test+Result 2nd test (mg/kg)	Result 3rd test (mg/kg)	Detection Limit (mg/kg)	7*Limit (mg/kg)	Limit (mg/kg)
Silver (Ag)	ND	ND	ND	ND	0.05	0.56	0.08
Aluminium (Al)	ND	ND	ND	ND	1	35	5
Chromium (Cr)	ND	ND	ND	ND	0.02	1.75	0.250
Cobalt (Co)	ND	ND	ND	ND	0.01	0.14	0.02
Copper (Cu)	ND	ND	ND	ND	0.5	28	4
Iron (Fe)	ND	ND	ND	ND	1	280	40
Manganese (Mn)	ND	ND	ND	ND	0.1	12.6	1.8
Molybdenum(Mo)	ND	ND	ND	ND	0.02	0.84	0.12
Nickel (Ni)	ND	ND	ND	ND	0.1	0.98	0.14
Tin (Sn)	ND	ND	ND	ND	10	700	100
Vanadium (V)	ND	ND	ND	ND	0.005	0.07	0.01
Zinc (Zn)	ND	ND	ND	ND	1	35	5
Antimony (Sb)	ND	ND	ND	ND	0.01	0.28	0.04
Arsenic (As)	ND	ND	ND	ND	0.001	0.014	0.002
Barium (Ba)	ND	ND	ND	ND	0.1	8.4	1.2
Beryllium (Be)	ND	ND	ND	ND	0.01	0.07	0.01
Cadmium (Cd)	ND	ND	ND	ND	0.001	0.035	0.005
Lead (Pb)	ND	ND	ND	ND	0.005	0.070	0.010
Lithium (Li)	ND	ND	ND	ND	0.010	0.336	0.048
Mercury (Hg)	ND	ND	ND	ND	0.003	0.021	0.003
Thallium (Tl)	ND	ND	ND	ND	0.0001	0.0007	0.0001
Magnesium(Mg)	ND	ND	ND	ND	1	-	-
Titanium(Ti)	ND	ND	ND	ND	1	-	-

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Tested component (11):							
Elements	Result 1st test (mg/kg)	Result 2nd test (mg/kg)	Result 1st test+Result 2nd test (mg/kg)	Result 3rd test (mg/kg)	Detection Limit (mg/kg)	7*Limit (mg/kg)	Limit (mg/kg)
Silver (Ag)	ND	ND	ND	ND	0.05	0.56	0.08
Aluminium (Al)	ND	ND	ND	ND	1	35	5
Chromium (Cr)	0.09	0.02	0.11	0.03	0.02	1.75	0.250
Cobalt (Co)	ND	ND	ND	ND	0.01	0.14	0.02
Copper (Cu)	ND	ND	ND	ND	0.5	28	4
Iron (Fe)	2	ND	2	ND	1	280	40
Manganese (Mn)	ND	ND	ND	ND	0.1	12.6	1.8
Molybdenum(Mo)	ND	ND	ND	ND	0.02	0.84	0.12
Nickel (Ni)	ND	ND	ND	ND	0.1	0.98	0.14
Tin (Sn)	ND	ND	ND	ND	10	700	100
Vanadium (V)	ND	ND	ND	ND	0.005	0.07	0.01
Zinc (Zn)	ND	ND	ND	ND	1	35	5
Antimony (Sb)	ND	ND	ND	ND	0.01	0.28	0.04
Arsenic (As)	0.001	ND	0.001	ND	0.001	0.014	0.002
Barium (Ba)	ND	ND	ND	ND	0.1	8.4	1.2
Beryllium (Be)	ND	ND	ND	ND	0.01	0.07	0.01
Cadmium (Cd)	ND	ND	ND	ND	0.001	0.035	0.005
Lead (Pb)	ND	ND	ND	ND	0.005	0.070	0.010
Lithium (Li)	ND	ND	ND	ND	0.010	0.336	0.048
Mercury (Hg)	ND	ND	ND	ND	0.003	0.021	0.003
Thallium (Tl)	ND	ND	ND	ND	0.0001	0.0007	0.0001
Magnesium(Mg)	ND	ND	ND	ND	1	-	-
Titanium(Ti)	ND	ND	ND	ND	1	-	-

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Tested component (14):							
Elements	Result 1st test (mg/kg)	Result 2nd test (mg/kg)	Result 1st test+Result 2ndtest (mg/kg)	Result 3rd test (mg/kg)	Detection Limit (mg/kg)	7*Limit (mg/kg)	Limit (mg/kg)
Silver (Ag)	ND	ND	ND	ND	0.05	0.56	0.08
Aluminium (Al)	ND	ND	ND	ND	1	35	5
Chromium (Cr)	0.13	0.06	0.19	0.05	0.02	1.75	0.250
Cobalt (Co)	ND	ND	ND	ND	0.01	0.14	0.02
Copper (Cu)	ND	ND	ND	ND	0.5	28	4
Iron (Fe)	ND	ND	ND	ND	1	280	40
Manganese (Mn)	1.8	0.7	2.5	0.5	0.1	12.6	1.8
Molybdenum(Mo)	ND	ND	ND	ND	0.02	0.84	0.12
Nickel (Ni)	ND	ND	ND	ND	0.1	0.98	0.14
Tin (Sn)	ND	ND	ND	ND	10	700	100
Vanadium (V)	ND	ND	ND	ND	0.005	0.07	0.01
Zinc (Zn)	ND	ND	ND	ND	1	35	5
Antimony (Sb)	ND	ND	ND	ND	0.01	0.28	0.04
Arsenic (As)	ND	ND	ND	ND	0.001	0.014	0.002
Barium (Ba)	ND	ND	ND	ND	0.1	8.4	1.2
Beryllium (Be)	ND	ND	ND	ND	0.01	0.07	0.01
Cadmium (Cd)	ND	ND	ND	ND	0.001	0.035	0.005
Lead (Pb)	0.011	0.009	0.020	ND	0.005	0.070	0.010
Lithium (Li)	ND	ND	ND	ND	0.010	0.336	0.048
Mercury (Hg)	ND	ND	ND	ND	0.003	0.021	0.003
Thallium (Tl)	ND	ND	ND	ND	0.0001	0.0007	0.0001
Magnesium(Mg)	ND	ND	ND	ND	1	-	-
Titanium(Ti)	ND	ND	ND	ND	1	-	-

ND = Not detected

σ = Means retest result

Remark: The submitted sample is a repeated use article. The migration test was carried out three times on the same article. The sum of the results of the first and second tests should not exceed seven times the limit (Result 1st test + Result 2nd test < 7 * limit) and the Result 3rd test shouldn't exceed the limit.

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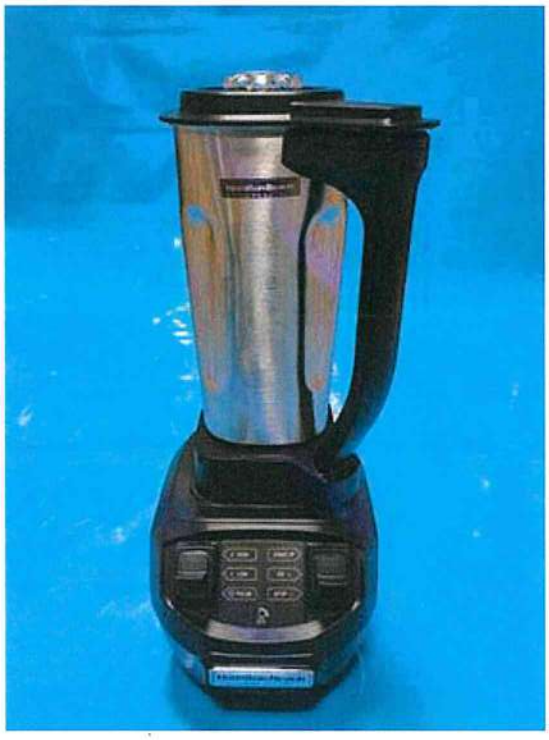
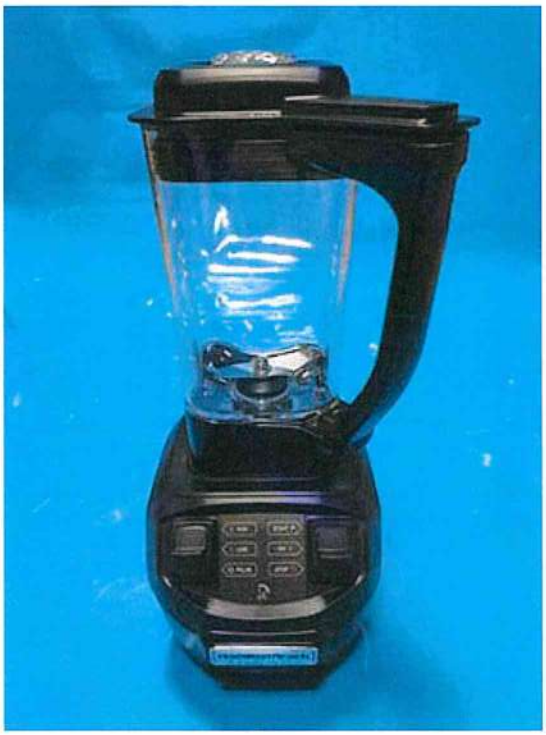
Sample photo





Remark:
1. No test was conducted on component 12 in this report, and the test results were transferred from the test component 12 in report 200714088GZU-004 dated in Sep 10, 2020.
2. No test was conducted on component 13 in this report, and the test results were transferred from the test component 13 in report 200714088GZU-004 dated in Sep 10, 2020.
3. No test was conducted on component 14 in this report, and the test results were transferred from the test component 14 in report 200714088GZU-004 dated in Sep 10, 2020.

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End of report

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