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Test Report Number: 200502098SHA-002(S1)

Applicant: Ningbo Symay Electrical Appliances ENTERPRISE Co, Ltd
18 Yan Tang He Road, Daqi Sub District, BeiLun District, Ningbo City, Zhejiang Province, PRC

Date: Apr 13, 2021
THIS IS TO SUPERSEDE REPORT NO. 200502098SHA-002 DATED JULY 08, 2020

Sample Description:

Item Name	:	**Coffee maker**
Model No.	:	CM-501E
Part Name	:	CM-101 Series, CM-102 Series, CM-103 Series, CM-105 Series, CM-106 Series, CM-107 Series, CM-108 Series, CM-109 Series, CM-110 Series, CM-111 Series, CM-112 Series, CM-113 Series, CM-115 Series, CM-116 Series, CM-117 Series, CM-118 Series, CM-119 Series, CM-121 Series, CM-122 Series, CM-123 Series, CM-125 Series, CM-126 Series, CM-127 Series, CM-128 Series, CM-129 Series, CM-130 Series, CM-131 Series, CM-132 Series, CM-135 Series, CM-136 Series, CM-137 Series, CM-138 Series, CM-202 Series, CM-203 Series, CM-301 Series, CM-302 Series, CM-501 Series, CM-209 Series, CM-503 Series, CM-505 Series, BV-1500TD Series; BV-1500TS Series,
Material Description	:	1-1) Black PP; 1-2) White PP; 2) Transparent brown PP(PSC); 3) Transparent brown PSU; 4) Black PA 66; 5) Black POM; 6) White PET; 7) Black PP+GF; 8) White PTFE; 9) Transparent silicone; 10) Silvery SUS; 11) Aluminium Alloy tube; 12) White ceramic mug; 13) Transparent glass; 14) Glass with silvery coating (outside)

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Tests Requirement:

According to the test results of below test parameters, the food contacting components of submitted sample complied with the suggested food contacting testing parameters for German §30 and §31 LFGB and also complied with general requirement of regulation EC 1935/2004 article 3, paragraph 1.

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Tests conducted:

As Requested By The Applicant, For Details Refer To Attached Page(S)

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To be continued

Authorized By:
For Intertek Testing Services Ltd., Shanghai

Jonny Jing
Operation Manager

Intertek Testing Services Ltd., Shanghai 上海天祥质量技术服务有限公司 检测报告专用章

Test Report Number: 200502098SHA-002(S1)

Tests conducted:

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

1) Sensory test on finished product
2) Global migration on plastic
3) Specific Migration of Heavy metal on plastic
4) Specific Migration of Primary aromatic amines on plastic
5) Specific Migration of Bisphenol A on plastic
6) Specific Migration of Hexamethylenediamine for PA66
7) Specific Migration of PA Oligomers And Caprolactam
8) Specific Migration of Formaldehyde Test
9) Volatile organic matter and peroxide residues on silicone rubber
10) Extractable compounds on silicone rubber
11) Organotin content on silicone rubber
12) Chemical tests for Non-stick coating
13) Migration of Perfluorooctane sulfonates (PFOS) and perfluorooctanoic acid (PFOA) on non-stick coating
14) Specific migration of Terephthalic acid Test
15) Specific migration of Ethylene glycol Test
16) Specific Migration of Acetaldehyde Test
17) Specific Migration of Diethylene Glycol Test
18) Specific Migration of Isophthalic Acid Test
19) Specific Migration Of Antimony trioxide
20) Total Polycyclic aromatic hydrocarbons on plastic and silicone rubber
21) Total Lead and Cadmium content on plastic and silicone rubber
22) Determination of Heavy metal release on metal part
23) Leachable Pb, Cd & Co (Internal) content on ceramic / glass

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To be continued

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Tests Conclusion:

Tested Components of submitted sample	Standard	Result
	Sensory Analysis-Odour Test and Off-Taste Test	Pass
	European Commission Regulation No. 10/2011, amendment No. 2020/1245 and other amendments and Regulation No. 1935/2004 - Overall migration	Pass
	European Commission Regulation No. 10/2011 Annex II and Amendment No. 2016/1416 and No. 2017/752 and No. 2020/1245 and Regulation 1935/2004 on specific migration of heavy metal content	Pass
	European Commission Regulation No. 10/2011 Annex I and II and Amendment No. 2020/1245 and Regulation 1935/2004 on specific migration of Primary aromatic amines	Pass
	European Commission Regulation No. 10/2011 and amendment No. 2018/213 - Specific migration of Bisphenol A	Pass
	European commission regulation NO. 10/2011 annex I, Amendment (EU) 2016/1416 of 24 August 2016 and Regulation 1935/2004 - Specific migration of Hexamethylenediamine	Pass
	LFGB requirement- Specific Migration of PA Oligomers	Pass
	European regulation (EU) No. 10/2011 and it's amendments on specific migration of Caprolactam	Pass
	European commission regulation NO. 10/2011 annex I, and its amendments - Specific migration of Formaldehyde	Pass
	German food, commodities and feeding act(LFGB), plastic recommendation BII XV, requirement on Volatile Organic Matter and Peroxide Residues in silicon rubber	Pass
	German Food, Commodities and Feeding Act(LFGB), Plastic Recommendation XV, Requirement on Extractable Substances in Silicone Rubber	Pass
	LFGB requirement- Organotin content	Pass
	LFGB requirement - Chemical tests for non-stick coating	Pass
	Migration of Perfluorooctane Sulfonates (PFOS) and Perfluorooctanoic Acid (PFOA)	Pass

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To be continued

European commission regulation NO. 10/2011 Annex I and its amendments and Regulation 1935/2004 - Specific migration of Terephthalic acid	Pass
European commission regulation NO. 10/2011 Annex I and its amendments and Regulation 1935/2004 - Specific migration of Ethylene glycol	Pass
European Commission Regulation No. 10/2011 Annex I and its amendments Regulation No. 1935/2004 - Specific migration of Acetaldehyde	Pass
European commission regulation NO. 10/2011 Annex I and its amendments and Regulation 1935/2004 - Specific migration of Diethylene glycol	Pass
European Commission Regulation No. 10/2011 Annex I and its amendments and Regulation No. 1935/2004 –Specific migration of Isophthalic acid	Pass
European commission regulation NO. 10/2011 Annex I and its amendments and Regulation 1935/2004 -Specific migration of Antimony trioxide	Pass
LFGB reguirement on Total PAHs content	Pass
LFGB reguirement on Total Lead and Cadmium content	Pass
EU Technical Guide Council of Europe Resolution CM/Res (2013) 9 on metals and alloys Used in Food Contact Materials and Articles on specific migration of heavy metal	Pass
LFGB requirement - Leachable Lead, Cadmium and Cobalt content	Pass

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To be continued

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1) Sensory Evaluation

With reference to §64 LFGB l00.90-6.

Test procedure:
Sample was thoroughly rinsed with distilled water and then filled with distilled water to capacity. Filled sample was kept at ambient temperature 100 °C and relative humidity (40-80%) for 1 hour. Off-odor and off-taste was evaluated with 6 panelists using control sample of distilled water.

	Result	Limit
Appearance	Clear, Colourless	Clear, Colourless
Odor	0	2.5
Taste	0	2.5

Assessment:
Intensity scale:
0 = No perceptible odour / taste
1 = Odour / taste just perceptible (but still difficult to define)
2 = Slight odour / taste
3 = Distinct odour / taste
4 = Strong odour / taste

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To be continued

2) Overall Migration Test For Plastic Food Contacting Materials/Articles

As per commission regulation (EU) NO. 10/ 2011 of 14 January 2011 and its amendments plastic materials and articles intended to come into contact with food.

I. Intended food contact conditions:
OM4. High temperature applications for all food simulants at temperature up to 100 ℃.

II. Test Condition:

Food Simulant	Time	Temperature(°C)
(C) Ethanol 20% (v/v)	1 hour	100

III Test Result:

Tested Component	Result in mg/dm^2		
	Ethanol 20% (v/v)		
	1st	2nd	3rd
(1-1)	<3.0	<3.0	<3.0
(1-2)	<3.0	<3.0	<3.0
(2)	<3.0	<3.0	<3.0
(3)	<3.0	<3.0	<3.0
(4)	7.9	3.8	<3.0
(5)	<3.0	<3.0	<3.0
(6)	<3.0	<3.0	<3.0
(7)	<3.0	<3.0	<3.0
(8)	<3.0	<3.0	<3.0
Limit in mg/dm^2	10	10	10

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To be continued

3) Specific Migration Of Metal For Plastic Food Contacting Materials/Articles

As per commission regulation (EU) NO. 10/ 2011 and its amendment No. 2016/1416, No. 2017/752, No. 2018/79 and No. 2020/1245 on plastic materials and articles intended to come into contact with food.

I. Test Condition:

Food Simulant	Time (hours)	Temperature (°C)
(B) Acetic acid 3% (w/v)	1	100

II. Test Result:

Test Component: (1-1) (1-2) (2) (3) (4) (5) (6) (7) (8)

Element	Result (mg/kg)			Reporting limit (mg/kg)	Limit (mg/kg)
	1st migration	2nd migration	3rd migration		
Aluminum(Al)	ND	ND	ND	0.1	1
Antimony(Sb)	ND	ND	ND	0.01	0.04
Arsenic(As)	ND	ND	ND	0.01	ND
Barium(Ba)	ND	ND	ND	0.1	1
Cadmium(Cd)	ND	ND	ND	0.002	ND
Chromium(Cr)	ND	ND	ND	0.01	ND
Cobalt(Co)	ND	ND	ND	0.03	0.05
Copper(Cu)	ND	ND	ND	1	5
Iron(Fe)	ND	ND	ND	5	48
Lead(Pb)	ND	ND	ND	0.01	ND
Lithium(Li)	ND	ND	ND	0.1	0.6
Manganese(Mn)	ND	ND	ND	0.1	0.6
Mercury(Hg)	ND	ND	ND	0.01	ND
Nickel(Ni)	ND	ND	ND	0.01	0.02
Zinc(Zn)	ND	ND	ND	1	5
Tungsten(W)	ND	ND	ND	0.02	0.05
Europium(Eu)	ND	ND	ND	0.01	0.05
Gadolinium(Gd)	ND	ND	ND	0.01	0.05
Lanthanum(La)	ND	ND	ND	0.01	0.05
Terbium(Tb)	ND	ND	ND	0.01	0.05
Sum of (Eu, Gd, La, Tb)	ND	ND	ND	0.04	0.05

Remark: ND=Not detected
Per client request, add the migration limit of Tungsten which was quoted from Amendment (EU) 2018/79 of 18 January 2018.

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To be continued

4) Specific Migration Of Primary Aromatic Amines Test

With reference to Commission Regulation (EU) No. 10/2011 and its amendments and JRC Technical Guidelines EUR 24815 EN 2011.

I. Test Condition:

Food Simulant	Time (Hours)	Temperature(°C)
(B) Acetic acid 3% (w/v)	1	100

II. Test Result:

Test Component: (1-1) (2) (3) (4) (5) (7)

Test Item		CAS No.	Result (mg/kg)			Reporting Limit (mg/kg)	Limit (mg/kg)
			1st migration	2nd migration	3rd migration		
1	4-Aminodiphenyl	92-67-1	ND	ND	ND	0.002	ND
2	Benzidine	92-87-5	ND	ND	ND	0.002	ND
3	4-Chloro-o-Toluidine	95-69-2	ND	ND	ND	0.002	ND
4	2-Naphthylamine	91-59-8	ND	ND	ND	0.002	ND
5	o-Aminoazotoluene	97-56-3	ND	ND	ND	0.002	ND
6	2-Amino-4-Nitrotoluene	99-55-8	ND	ND	ND	0.002	ND
7	p-Chloroaniline	106-47-8	ND	ND	ND	0.002	ND
8	2,4-Diaminoanisole	615-05-4	ND	ND	ND	0.002	ND
9	4,4'-Diaminodiphenylmethane	101-77-9	ND	ND	ND	0.002	ND
10	3,3'-Dichlorobenzidine	91-94-1	ND	ND	ND	0.002	ND
11	3,3'-Dimethoxybenzidine	119-90-4	ND	ND	ND	0.002	ND
12	3,3'-Dimethylbenzidine	119-93-7	ND	ND	ND	0.002	ND
13	3,3'-Dimethyl-4,4'diaminodiphenylmethane	838-88-0	ND	ND	ND	0.002	ND
14	p-Cresidine	120-71-8	ND	ND	ND	0.002	ND
15	4,4'-Methylene-Bis(2-Chloroaniline)	101-14-4	ND	ND	ND	0.002	ND
16	4,4'-Oxydianiline	101-80-4	ND	ND	ND	0.002	ND
17	4,4'-Thiodianiline	139-65-1	ND	ND	ND	0.002	ND
18	o-Toluidine	95-53-4	ND	ND	ND	0.002	ND
19	2,4-Toluylenediamine	95-80-7	ND	ND	ND	0.002	ND
20	2,4,5-Trimethylaniline	137-17-7	ND	ND	ND	0.002	ND
21	o-Anisidine	90-04-0	ND	ND	ND	0.002	ND
22	4-Aminoazobenzene	60-09-3	ND	ND	ND	0.002	ND
23	m-Phenylendiamine	108-45-2	ND	ND	ND	0.002	ND
23	p-Phenylendiamine	106-50-3	ND	ND	ND	0.002	ND
24	Benzoguanamin	91-76-9	ND	ND	ND	0.05	5
25	4,4'-Methylenebis (3-chloro-2,6-diethylaniline	106246-33-7	ND	ND	ND	0.01	0.05
26	Total of other primary aromatic amine	-	ND	ND	ND	0.01	0.01

Remark：ND = Not detected (less than reporting limit)

Other primary aromatic amines are p-Phenylendiamine, Aniline, 2,4-Xylidine, 2,6-Xylidine, 3-Methoxyaniline, 2,6- Toluene-diamine, 1,5-Diaminonaphthalene, 4-Ethoxyaniline, 3-Amino-4-methoxybenzanilide, 3-Amino-4-methylbenzamide, 2-Amino-5-methylbenzoic acid

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To be continued

5) Specific Migration Of Bisphenol A For Plastic Food Contacting Materials/Articles

With reference to Commission Regulation (EU) No. 10/2011 and amendment No. 2018/213 on plastic materials and articles intended to come into contact with food. And followed by Liquid Chromatography-Mass Spectrometry (LC-MS) analysis.

I. Test Condition: Temperature： 100 °C Time: 1 hour

II. Test Results:

Tested Component	Result in mg/kg
	Ethanol 20% (v/v)
(1-1)	<0.01
(1-2)	<0.01
(2)	<0.01
(3)	<0.01
(4)	<0.01
(5)	<0.01
(6)	<0.01
(7)	<0.01
(8)	<0.01
(9)	<0.01
Limit in mg/kg	0.05

Remark： Report limit=0.01mg/kg
ND=Not detected（less than report limit）

Comment: The testing scope of the following standard was not applicable to the tested component of submitted samples. However, the test results of the tested components met the related limits as stated in this report.

6) Specific Migration of Hexamethylenediamine For Plastic Food Contacting Materials/Articles

As per commission regulation (EU) NO. 10/ 2011 of 14 January 2011 and Amendment (EU) 2016/1416 of 24 August 2016 on plastic materials and articles intended to come into contact with food, followed by Gas Chromatography-Mass Spectrometer (GC-MS) analysis.

I. Test Condition:

Food Simulant	Time	Temperature(°C)
(C) Ethanol 20% (v/v)	1 hour	100

II. Test Result:

Tested Component	Result in mg/kg
	20% (v/v) ethanol
(4)	<1.0
Limit in mg/kg	2.4

Remark: ND=Not detected
Detection Limit = 1.0 mg/kg

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To be continued

7) Specific Migration of PA Oligomers And Caprolactam

As per Commission Regulation (EU) No. 10/2011，by HPLC/MS/MS analysis.

I. Test Condition:

Food Simulant	Time (hour)	Temperature(ºC)
Ethanol 20% (v/v)	1 hour	100

II. Test result

Compound	Result (mg/kg)	Report limit (mg/kg)	Requirement(mg/kg)
	(4)		
PA6 oligomers	0.5	0.1	-
PA66 oligomers	2.3	0.1	-
Sum of above oligomers	2.8	0.1	5
Caprolactam	8.5	5	15

Remark:
ND = Not detected (less than reporting limit)
The result was analysed on the third migration for repeated use item.

8) Specific Migration Of Formaldehyde Test For Plastic Food Contacting Materials/Articles

As per Commission Regulation (EU) No. 10/2011 and its amendments on plastic materials and articles intended to come into contact with food.

I. Test Condition:
Temperature: 100 °C Time: 1 hour

II. Test Result：

Tested Component	Food simulant	Result (mg/kg)	Limit (mg/kg)
(5)	3% (w/v) acetic acid	<5	15

Remark: # =The result was based on the third extraction test

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To be continued

9) Volatile Organic Matter and Peroxide Residues Of Silicone Rubber

As per LFGB Recommendation BII XV.

Volatile Organic Matter

I. Test Condition:

Temperature: 200 °C Time: 4 hours

II. Test Result:

Tested Component / Sample	Result (%(w/w))	Limit (%(w/w))
(9)	0.42	0.5

Peroxide Residues

I. Test Result:

Tested Component / Sample	Result	Requirement
(9)	No positive reaction	No positive reaction to peroxides

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To be continued

10) Extractable Substances Of Silicone Rubber

As per LFGB, Plastic Recommendation XV.

I. Test Condition:

Temperature: 100 °C Time: 5 hours

Food Simulant	Result (%) (9)	Limit (%)
Water	<0.1	0.5

Comment: The testing scope of the following standard(s) were not applicable to the submitted samples. However, the test results of the samples met the related requirements as stated in this report.

11) Organotin Content

With reference to DIN EN ISO 17353, by Gas Chromatographic Mass-Spectrometric (GC-MS) analysis.

Compound	Result (µg /kg) (9)	Limit (µg /kg)
Monobutyltin	< 25	25
Monomethyltin	< 25	25
Monooctyltin	< 25	25
Dibutyltin	< 25	25
Dimethyltin	< 25	25
Dioctyltin	< 25	25
Tetrabutyltin	< 25	25
Tributyltin	< 25	25
Trioctyltin	< 25	25

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To be continued

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12) Chemical Tests For Non-Stick Coating

By Spectrometric, Liquid Chromatographic and Liquid Chromatographic – Mass Spectrometric analysis.

I. Test Condition:

	Test Item	Simulant	Temperature and Time
(1)	Formaldehyde	3% acetic acid	100 °C and 1 hour
(2)	Phenolic substances	95% ethanol	60 °C and 3 hours
(3)	1,4-Dihydroxybenzene	95% ethanol	60 °C and 3 hours
(4)	Primary Aromatic Amines	3% acetic acid	100 °C and 1 hour

II. Test Item:

		Result (8)	Limit
(1)	Extractable Formaldehyde content (mg/kg)	<1	15 (max.)
(2)	Specific migration of Phenolic substances (mg/dm2)	<0.05	0.05 (max.)
(3)	Specific migration of 1,4-dihydroxybenzene (mg/kg)	<0.2	0.6 (max.)
(4)	Specific migration of Primary Aromatic Amines (PAA) (mg/kg)	ND	15 (max.)
	4-Aminodiphenyl	ND (<0.002)	ND
	2-Methoxyaniline	ND (<0.002)	ND
	Benzidine	ND (<0.002)	ND
	p-Chloraniline	ND (<0.002)	ND
	4-Chloro-o-toluidine	ND (<0.002)	ND
	4,4'-Oxydianiline	ND (<0.002)	ND
	4,4-Diaminodiphenylmethan	ND (<0.002)	ND
	3,3'-Dimethyl-4,4'-diaminodiphenylmethan	ND (<0.002)	ND
	p-Cresidine	ND (<0.002)	ND
	p-Phenylendiamine	ND (<0.002)	ND
	2,4-Diaminoanisol	ND (<0.002)	ND
	o-Toluidine	ND (<0.002)	ND
	2,4-Toluene-diamine	ND (<0.002)	ND
	3,3'-Dimethylbenzidine	ND (<0.002)	ND
	2,4,5-Trimethylaniline	ND (<0.002)	ND
	2-Naphthylamine	ND (<0.002)	ND
	4,4'-Methylenbis-(2-chloraniline)	ND (<0.002)	ND
	3,3'-Dimethoxybenzidine	ND (<0.002)	ND
	3,3'-Dichlobenzidine	ND (<0.002)	ND
	4,4'-Thiodianiline	ND (<0.002)	ND
	4-Aminoazobenzene	ND (<0.002)	ND
	Aniline	ND (<0.01)	ND
	2,4-xylidine	ND (<0.01)	ND
	2,6-xylidine	ND (<0.01)	ND
	m-phenylendiamine	ND (<0.01)	ND
	2,6-toluene-diamine	ND (<0.01)	ND
	1,5-diaminonaphthalene	ND (<0.01)	ND
	3-methoxyaniline	ND (<0.01)	ND
	Sum of above PAA content	ND	ND

Remark: ND = Not Detected

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To be continued

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13) Specific Migration of Perfluorooctane Sulfonates (PFOS) and Perfluorooctanoic Acid (PFOA)

By Liquid Chromatographic – Mass Spectrometric (LC-MS) Analysis.

I. Test Condition:

Tested component	Simulant	Temperature and Time
(8)	20% (v/v) Ethanol	100 °C and 1 hour

II. Test Result:

Compounds	Result (mg/dm^2)	Requirement (mg/dm^2)
	20% (v/v) Ethanol	
PFOS	<0.005	---
PFOA	<0.005	---
Total	<0.005	0.005

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To be continued

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

As per commission regulation (EU) NO. 10/ 2011 of 14 January 2011 and its amendments on plastic materials and articles intended to come into contact with food, followed by High Performance Liquid Chromatography with Diode Array Detection (HPLC-DAD) analysis.

I. Test Condition:

	Food Simulant	Time	Temperature(°C)
(C)	Ethanol 20% (v/v)	1 hour	100

II. Test Result:

Tested Component	Result in mg/kg 20% (v/v) ethanol
(6)	<1.0
Limit in mg/kg	7.5

15) Specific Migration of Ethylene Glycol Test for Plastic Food Contacting

As per commission regulation (EU) NO. 10/ 2011 of 14 January 2011 and its amendments on plastic materials and articles intended to come into contact with food, followed by Headspace Sampler and Gas Chromatography-Mass Spectrometer (HS-GC-MS) analysis.

I. Test Condition:

	Food Simulant	Time	Temperature(°C)
(C)	Ethanol 20% (v/v)	1 hour	100

II. Test Result:

Tested Component	Result in mg/kg 20% (v/v) ethanol
(6)	<10
Limit in mg/kg	30

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To be continued

16) Specific Migration of Acetaldehyde Test for Plastic Food Contacting Materials/Articles

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

I. Test Condition:

Food Simulant	Time	Temperature(°C)
(C) Ethanol 20% (v/v)	1 hour	100

II. Test Result:

Tested Component	Result in mg/kg 20% (v/v) ethanol
(6)	<1.0
Limit in mg/kg	6

Remark: ND = Not detected (less than report limit)
Report Limit=1.0mg/kg

17) Specific Migration of Diethylene Glycol Test for Plastic Food Contacting Materials/Articles

As per commission regulation (EU) NO. 10/ 2011 of 14 January 2011 and its amendments on plastic materials and articles intended to come into contact with food, followed by Headspace Sampler and Gas Chromatography-Mass Spectrometer (HS-GC-MS) analysis.

I. Test Condition:

Food Simulant	Time	Temperature(°C)
(C) Ethanol 20% (v/v)	1 hour	100

II. Test Result:

Tested Component	Result in mg/kg 20% (v/v) ethanol
(6)	<30
Limit in mg/kg	30

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To be continued

18) Specific Migration of Isophthalic Acid Test

As per Commission Regulation (EU) No. 10/2011, selection of test condition & food simulants by 82/711/EEC, 85/572/EEC and its amendment and EN 13130-1.

I. Test Condition:

Food Simulant	Time	Temperature(°C)
(C) Ethanol 20% (v/v)	1 hour	100

II. Test Result:

Tested Component	Result in mg/kg 20% (v/v) ethanol
(6)	<5
Limit in mg/kg	5

Remark: ND = Not detected (less than report limit)
Report Limit=1.0mg/kg

19) Specific Migration Of Antimony trioxide For Plastic Food Contacting Materials/Articles

As per commission regulation (EU) NO. 10/ 2011 of 14 January 2011 and its amendments on plastic materials and articles intended to come into contact with food.

I. Test Condition:

Food Simulant	Time	Temperature(°C)
(C) Ethanol 20% (v/v)	1 hour	100

II Test Result:

· For specific migration of antimony trioxide(expressed as antimony)：

Test component	Food simulant	Result (express as antimony) (mg/kg)	Limit (express as antimony) (mg/kg)
(6)	3% (w/v) acetic acid	<0.02	0.04

Remark：Report limit (express as antimony) = 0.02 mg/kg

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To be continued

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20) Polycyclic aromatic hydrocarbons (PAHs) content

By solvent extraction and determined by Gas Chromatography - Mass Spectrometry Detector (GC-MSD).

Test Result:

Compound	Result in mg/kg										Limit (mg/kg)
	(1-1)	(1-2)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
Naphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	/
Acenaphthylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	/
Acenaphthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	/
Fluorene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	/
Phenanthrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	/
Anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	/
Fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	/
Pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	/
Chrysene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	/
Benzo[a]anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	/
Benzo[b]fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	/
Benzo[k]fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	/
Benzo[a]pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2
Dibenzo[a,h]anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	/
Indeno[1,2,3-cd]pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	/
Benzo[g,h,i]perylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	/
Benzo[j]fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	/
Benzo[e]pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	/
Sum of PAHs	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1

Remark: Detection Limit = 0.2 ppm
ppm = Parts per million = mg/kg
ND = Not Detected
For mouth contact article, each PAH contact should be less than 0.2 mg/kg

21) Total Lead (Pb) And Cadmium (Cd) Content

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

Tested elements	Result (mg/kg)										Limit (mg/kg)
	(1-1)	(1-2)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
Lead (Pb)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	100
Cadmium (Cd)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	100

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To be continued

22) 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 Mass Spectrometer (ICP-MS) with reference to ISO 17294-2:2016 respectively.

I. Test Condition:

Temperature: 100 °C Time: 1 hour

II. Test Result:

Food Simulant: Artificial tap water (prepare according DIN 10531 Clause 4.2.2.2)

Elements	Result 1st test (mg/kg) (10)	Result 2nd test (mg/kg) (10)	Result1st test +Result 2ndtest (mg/kg) (10)	7*Limit (mg/kg)	Result 3rd test (mg/kg) (10)	Limit (mg/kg)
Silver (Ag)	<0.05	<0.05	<0.05	0.56	<0.05	0.08
Aluminium (Al)	<1	<1	<1	35	<1	5
Chromium (Cr)	<0.02	<0.02	<0.02	1.75	<0.02	0.250
Cobalt (Co)	<0.01	<0.01	<0.01	0.14	<0.01	0.02
Copper (Cu)	<0.5	<0.5	<0.5	28	<0.5	4
Iron (Fe)	<1	<1	<1	280	<1	40
Manganese (Mn)	<0.1	<0.1	<0.1	12.6	<0.1	1.8
Molybdenum(Mo)	<0.02	<0.02	<0.02	0.84	<0.02	0.12
Nickel (Ni)	<0.1	<0.1	<0.1	0.98	<0.1	0.14
Tin (Sn)	<10	<10	<10	700	<10	100
Vanadium (V)	<0.005	<0.005	<0.005	0.07	<0.005	0.01
Zinc (Zn)	<1	<1	<1	35	<1	5
Antimony (Sb)	<0.01	<0.01	<0.01	0.28	<0.01	0.04
Arsenic (As)	<0.001	<0.001	<0.001	0.014	<0.001	0.002
Barium (Ba)	<0.1	<0.1	<0.1	8.4	<0.1	1.2
Beryllium (Be)	<0.01	<0.01	<0.01	0.07	<0.01	0.01
Cadmium (Cd)	<0.001	<0.001	<0.001	0.035	<0.001	0.005
Lead (Pb)	<0.005	<0.005	<0.005	0.070	<0.005	0.010
Lithium (Li)	<0.010	<0.010	<0.010	0.336	<0.010	0.048
Mercury (Hg)	<0.003	<0.003	<0.003	0.021	<0.003	0.003
Thallium (Tl)	<0.0001	<0.0001	<0.0001	0.0007	<0.0001	0.0001
Magnesium (Mg)	<5	<5	<5	-	<5	-
Titanium (Ti)	<0.1	<0.1	<0.1	-	<0.1	-

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To be continued

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Elements	Result 1st test (mg/kg) (11)	Result 2nd test (mg/kg) (11)	Result1st test +Result 2ndtest (mg/kg) (11)	7*Limit (mg/kg)	Result 3rd test (mg/kg) (11)	Limit (mg/kg)
Silver (Ag)	<0.05	<0.05	<0.05	0.56	<0.05	0.08
Aluminium (Al)	1.2	<1	1.2	35	<1	5
Chromium (Cr)	<0.02	<0.02	<0.02	1.75	<0.02	0.250
Cobalt (Co)	<0.01	<0.01	<0.01	0.14	<0.01	0.02
Copper (Cu)	<0.5	<0.5	<0.5	28	<0.5	4
Iron (Fe)	<1	<1	<1	280	<1	40
Manganese (Mn)	<0.1	<0.1	<0.1	12.6	<0.1	1.8
Molybdenum(Mo)	<0.02	<0.02	<0.02	0.84	<0.02	0.12
Nickel (Ni)	<0.1	<0.1	<0.1	0.98	<0.1	0.14
Tin (Sn)	<10	<10	<10	700	<10	100
Vanadium (V)	<0.005	<0.005	<0.005	0.07	<0.005	0.01
Zinc (Zn)	<1	<1	<1	35	<1	5
Antimony (Sb)	<0.01	<0.01	<0.01	0.28	<0.01	0.04
Arsenic (As)	<0.001	<0.001	<0.001	0.014	<0.001	0.002
Barium (Ba)	<0.1	<0.1	<0.1	8.4	<0.1	1.2
Beryllium (Be)	<0.01	<0.01	<0.01	0.07	<0.01	0.01
Cadmium (Cd)	<0.001	<0.001	<0.001	0.035	<0.001	0.005
Lead (Pb)	<0.005	<0.005	<0.005	0.070	<0.005	0.010
Lithium (Li)	<0.010	<0.010	<0.010	0.336	<0.010	0.048
Mercury (Hg)	<0.003	<0.003	<0.003	0.021	<0.003	0.003
Thallium (Tl)	<0.0001	<0.0001	<0.0001	0.0007	<0.0001	0.0001
Magnesium (Mg)	<5	<5	<5	-	<5	-
Titanium (Ti)	<0.1	<0.1	<0.1	-	<0.1	-

Remark：The submitted component 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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To be continued

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23) Leachable Lead And Cadmium And Cobalt Content

As per §64 LFGB B80.03-1 and B80.03-2, by Atomic Absorption Spectrophotometric (AAS) or Inductively Coupled Argon Plasma (ICP) analysis.

Tested Sample Specimen (12)	Volume of leaching Solution (mL)	Result Lead (ppm)	Cadmium (ppm)	Cobalt (ppm)
A	430	<0.05	<0.03	<0.03
B	430	<0.05	<0.03	<0.03
C	430	<0.05	<0.03	<0.03
D	430	<0.05	<0.03	<0.03
	Limit (hollowware):	4.0	0.3	0.05

Tested Sample Specimen (13)	Volume of leaching Solution (mL)	Result Lead (ppm)	Cadmium (ppm)	Cobalt (ppm)
A	1800	<0.05	<0.03	<0.03
B	1800	<0.05	<0.03	<0.03
C	1800	<0.05	<0.03	<0.03
D	1800	<0.05	<0.03	<0.03
	Limit (hollowware):	4.0	0.3	0.05

Tested Sample Specimen (14)	Volume of leaching Solution (mL)	Result Lead (ppm)	Cadmium (ppm)	Cobalt (ppm)
A	975	<0.05	<0.03	<0.03
B	975	<0.05	<0.03	<0.03
C	975	<0.05	<0.03	<0.03
D	975	<0.05	<0.03	<0.03
	Limit (hollowware):	4.0	0.3	0.05

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To be continued

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Photo(s)

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To be continued

Photo(s)

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Date sample received: Jun 02, 2020; Mar 19, 2021
Testing period: Jun 03, 2020 To Jun 18, 2020; Mar 19, 2021 to Mar 30, 2021

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End of Report