



SUBJECT Chemical Test

TEST LOCATION TÜV SÜD China

TÜV SÜD Products Testing (Shanghai) Co., Ltd.
B-3/4, No.1999 Du Hui Road, Minhang District
Shanghai 201108, P.R. China

CLIENT NAME Bibo Brands

CLIENT ADDRESS Torenplein 7.16.1 3500 Hasselt, Belgium

TEST PERIOD 10-Apr-2024~24-Apr-2024

RESULT SUMMARY

The tested items **complied with** Korean Ministry of Food and Drug Safety Standards and Specifications for Utensils, Containers and Packages.

- Lead content, Cadmium content, Mercury content and Hexavalent Chromium content	001 PASS
- Overall migration test	001~002 PASS
- Consumption of Potassium Permanganate	001 PASS
- Specific migration of Lead	001~002 PASS
- Specific migration of Di(2-ethylhexyl) Phthalate(DEHP)	001~002 PASS
- Coloring agent test	001~002 PASS
- Lead content	002~003 PASS
- Cadmium content	002 PASS
- Specific migration of Phenol	002 PASS
- Specific migration of Formaldehyde	002 PASS
- Specific migration of Zinc	002 PASS
- Antimony content	003 PASS
- Extractable Heavy metal test (Cd, Pb, Ni, CrVI, As)	003 PASS

Prepared By

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Note: (1) General Terms & Conditions as mentioned overleaf. (2) The results relate only to the items tested.(3) The test report shall not be reproduced except in full without the written approval of the laboratory.(4) Without the agreement of the laboratory, the client is not authorized to use the test results for unapproved. propaganda

SAMPLE SOURCE/ RECEIPT DATE / TEST DATE

Logistics Express / 10-Apr-2024/ 10-Apr-2024

THE FOLLOWING SAMPLE(S) WAS/WERE SUBMITTED

BY/ ON BEHALF OF THE CLIENTS AS

Sample Name: Kambukka Reno Insulated 600ml Matte Black - Audi

Sample Type/ Specification: 12-05013(Audi article number:3292400600)

Batch No./Date: 2023-315473

Manufacturer: /

SAMPLE NO.	TEST PART	DESCRIPTION	PHOTOGRAPH
721690221-1	001	Black plastic	
721690221-2	002	Black silicone	
721690221-3	003	Silvery metal	

TEST RESULT(S)

- Total Lead, Cadmium, Mercury and Hexavalent Chromium content
 - Test method: In accordance with Korean Ministry of Food and Drug Safety Standards and Specifications for Utensils, Containers and Packages IV. 2. 2-1 Lead Test Method a. Residue Test; 2-2 Cadmium Test Method a. Residue Test; 2-3 Mercury Test Method; 2-4 Hexavalent Chromium Test Method a. Residue Test

Test Item(s)	Result(s) [mg/kg]	Method Detection Limit [mg/kg]
	001	
Lead content (Pb)	<10	10
Cadmium content (Cd)	<10	10
Mercury content (Hg)	<10	10
Hexavalent Chromium content (Cr VI)	<10	10
Sum of Pb+ Cd+ Hg+ Cr(VI)	<40	--
Limit [Sum of Pb+ Cd+ Hg+ Cr(VI)]	should not exceed 100	--
Conclusion	PASS	--

- Overall migration test
 - Test method: In accordance with Korean Ministry of Food and Drug Safety Standards and Specifications for Utensils, Containers and Packages IV. 2. 2-8 Overall migration Test Method
 - Sample 001~002 migration ratio(S/V): 5dm²/L

Simulant(s) Used	Test Condition	Result(s) [mg/L]	Maximum Permissible Limit [mg/L]	Comment
		001		
Distilled water	100°C for 30 min	<5.00	30	PASS
4% Acetic acid	100°C for 30 min	<5.00	30	PASS
20% Ethanol	70°C for 30 min	6.8	30	PASS

Simulant(s) Used	Test Condition	Result(s) [mg/L]	Maximum Permissible Limit [mg/L]	Comment
		002		
Distilled water	100°C for 30 min	<5.00	60	PASS
20% Ethanol	70°C for 30 min	<5.00	60	PASS

- Consumption of Potassium Permanganate
 - Test method: In accordance with Korean Ministry of Food and Drug Safety Standards and Specifications for Utensils, Containers and Packages IV. 2. 2-7 Consumption of potassium permanganate Test Method
 - Sample 001 migration ratio(S/V): 5dm²/L

Simulant(s) Used	Test Condition	Result(s) [mg/L]	Maximum Permissible Limit [mg/L]	Comment
		001		
Distilled water	100°C for 30 min	1.98	10	PASS

4. Specific migration of Lead

- Test method: In accordance with Korean Ministry of Food and Drug Safety Standards and Specifications for Utensils, Containers and Packages IV. 2. 2-1 Lead Test Method b. Migrant Test
- Sample 001~002 migration ratio(S/V): 5dm²/L

Simulant(s) Used	Test Condition	Result(s) [mg/L]	Maximum Permissible Limit [mg/L]	Comment
		001		
4% Acetic acid	100°C for 30 min	<0.01	1.0	PASS

Simulant(s) Used	Test Condition	Result(s) [mg/L]	Maximum Permissible Limit [mg/L]	Comment
		002		
4% Acetic acid	100°C for 30 min	<0.01	1.0	PASS

5. Specific migration of Di(2-ethylhexyl) Phthalate(DEHP)

- Test method: In accordance with Korean Ministry of Food and Drug Safety Standards and Specifications for Utensils, Containers and Packages IV. 2. 2-19 Di-n-butylphthalate, Benzyl-n-butylphthalate, Di-(2-ethylhexyl)phthalate, Di-n-octylphthalate, Diisononylphthalate, Diisodecylphthalate and Di-(2-ethylhexyl)adipate Test Method
- Sample 001~002 migration ratio(S/V): 5dm²/L

Simulant(s) Used	Test Condition	Result(s) [mg/L]	Maximum Permissible Limit [mg/L]	Comment
		001		
20% Ethanol	70°C for 30 min	ND	ND (DL:0.01)	PASS

Simulant(s) Used	Test Condition	Result(s) [mg/L]	Maximum Permissible Limit [mg/L]	Comment
		002		
20% Ethanol	70°C for 30 min	ND	ND (DL:0.01)	PASS

Note: 1. DL denotes Detection Limit
2. ND denotes not detected, and less than Detection Limit

6. Coloring agent test

- Test method: In accordance with Korean Ministry of Food and Drug Safety Standards and Specifications for Utensils, Containers and Packages IV. 2. 2-15 Coloring agent Test Method

Simulant(s) Used	Test Condition	Result(s)	Maximum Permissible Limit	Comment
		001		
Distilled water	100°C for 30 min	Negative	Negative	PASS

Simulant(s) Used	Test Condition	Result(s)	Maximum Permissible Limit	Comment
		002		
Distilled water	100°C for 30 min	Negative	Negative	PASS

7. Lead content

- Test method: In accordance with Korean Ministry of Food and Drug Safety Standards and Specifications for Utensils, Containers and Packages IV. 2.2-1 Lead Test Method a. Residue Test

Test Item(s)	Result(s) [mg/kg]	Maximum Permissible Limit [mg/kg]	Comment
	002		
Lead content	<10	100	PASS

Test Item(s)	Result(s) [%]	Maximum Permissible Limit [%]	Comment
	003		
Lead content	<0.001	0.1	PASS

8. Cadmium content

- Test method: In accordance with Korean Ministry of Food and Drug Safety Standards and Specifications for Food Utensils, Containers and Packages IV. 2. 2-2 Cadmium Test Method a. Residue Test

Test Item(s)	Result(s) [mg/kg]	Maximum Permissible Limit [mg/kg]	Comment
	002		
Cadmium content	<10	100	PASS

9. Specific migration of Phenol

- Test method: In accordance with Korean Ministry of Food and Drug Safety Standards and Specifications for Food Utensils, Containers and Packages IV. 2. 2-26 Phenol Test Method
- Sample 002 migration ratio(S/V): 5dm²/L

Simulant(s) Used	Test Condition	Result(s) [mg/L]	Maximum Permissible Limit [mg/L]	Comment
		002		
4% Acetic acid	100°C for 30 min	<5.0	5.0	PASS

10. Specific migration of Formaldehyde

- Test method: In accordance with Korean Ministry of Food and Drug Safety Standards and Specifications for Food Utensils, Containers and Packages IV. 2. 2-27 Formaldehyde Test Method
- Sample 002 migration ratio(S/V): 5dm²/L

Simulant(s) Used	Test Condition	Result(s) [mg/L]	Maximum Permissible Limit [mg/L]	Comment
		002		
4% Acetic acid	100°C for 30 min	<4.0	4.0	PASS

11. Specific migration of Zinc

- Test method: In accordance with Korean Ministry of Food and Drug Safety Standards and Specifications for Food Utensils, Containers and Packages IV. 2. 2-50 Zinc Test Method
- Sample 002 migration ratio(S/V): 5dm²/L

Simulant(s) Used	Test Condition	Result(s) [mg/L]	Maximum Permissible Limit [mg/L]	Comment
		002		
4% Acetic acid	100°C for 30 min	<0.1	15	PASS

12. Antimony content

- Test method: In accordance with Korean Ministry of Food and Drug Safety Standards and Specifications for Utensils, Containers and Packages IV. 2.2-10 Antimony Test Method a. Residue Test

Test Item(s)	Result(s) [%]	Maximum Permissible Limit [%]	Comment
	003		
Antimony content	<0.001	5	PASS

13. Extractable Heavy metal test (Cd, Pb, Ni, CrVI, As)

- Test method: In accordance with Korean Ministry of Food and Drug Safety Standards and Specifications for Utensils, Containers and Packages IV. 2.2-1, 2.2-2, 2.2-54, 2.2-4, 2.2-9
- Sample 003 migration ratio(S/V): 3.96dm²/620ml

Test Item(s)	Test Condition	Result(s) [mg/L]	Maximum Permissible Limit [mg/L]	Comment
		003		
Cd	0.5% Citric acid, 100° C for 30 min	<0.01	0.1	PASS
Pb		<0.1	0.4	PASS
Ni		<0.01	0.1	PASS
CrVI		<0.04	0.1	PASS
As (as As ₂ O ₃)		<0.2	0.2	PASS

Note: This report is for internal use only such as internal scientific research, education, quality control, product R&D.

-END OF THE TEST REPORT-